

Procedure to Participate in Tender

Tender Enquiry No- TPSODL/OT/2021-22/057

Tender Enquiry No.	Work Description	EMD (Rs.)	Tender Fee (Inclusive of GST) (Rs.)	Last Date and Time for payment of Tender Fee
NIT Number: TPSODL/OT/21 -22/057	Rate Contract for supply of Control cables and Power Cable for the period of One Year	2 Lakhs	5,000	18.10.2021, 18:00 Hrs

Please note that corresponding details mentioned in this document will supersede any other details mentioned anywhere else in the Tender Document.

Procedure to Participate in Tender.

Following steps to be done before "Last date and time for Payment of Tender Fee" as mentioned above:

- 1. Eligible and Interested Bidders to submit duly signed and stamped letter on Bidder's letter head indicating
 - a. Tender Enquiry number
 - b. Name of authorized person
 - c. Contact number
 - d. E-mail id
 - e. Details of submission of Tender Fee
 - f. GST Registration No.
- 2. Non-Refundable Tender Fee, as indicated in table above, to be submitted in the form of Direct Deposit in the following bank account and submit the receipt along with a covering letter clearly indicating the Tender Reference/ Enquiry Number –

Beneficiary Name – TP Southern Odisha Distribution Limited Bank Name – Union Bank of India Branch Name – Kamapalli Branch, Berhampur. Account Type – TPSODL Corporate Expenditure Account. Account No – 625901010050070 IFSC Code – UBIN0562599

E-mail with necessary attachment of 1 and 2 above to be sent to Rajkishore.tripathy@tpsouthernodisha.com with copy to manoj.kharbanda@tpsouthernodisha.com before last date and time for payment of Tender Fee.



Interested bidders to submit Tender Fee and Authorization Letter before Last date and time as indicated above, after which link from TPSODL E-Tender system (Ariba) will be shared for further communication and bid submission.

Please note all future correspondence regarding the tender, bid submission, bid submission date extension, Pre-bid query etc will happen only through TPSODL E-Tender system (Ariba). User manual to guide the bidders to submit the bid through E-Tender system (Ariba) is also enclosed.

No e-mail or verbal correspondence will be responded. All communication will be done strictly with the bidders who have done the above step to participate in the Tender.

Also it may be strictly noted that once date of "Last date and time for Payment of Tender Participation Fee" is lapsed no Bidder will be sent link from TPSODL E-Tender System (Ariba). Without this link vendor will not be able to participate in the tender. Any last moment request to participate in tender will not be entertained.

Any payment of Tender Fee / EMD by Bidder who have not done the prerequisite will not be refunded.

Also all future corrigendum to the said tender will be informed on Tender section on website https://www.tpsouthernodisha.com/archivetenders.html



Open Tender Notification

For

Rate Contract for supply of Control cables and Power Cable for the period of One Year

Tender Enquiry No.: TPSODL/OT/2021-22/057

Due Date for Bid Submission: 29.10.2021; 17:00 Hours

TP SOUTHERN ODISHA DISTRIBUTION LIMITED

(A Tata Power and Odisha Government Joint Venture)

Procurement & Stores Department

Corporate office: Kamapalli, Courtpeta, Berhampur, Ganjam, Odisha, India -760 004



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1.0 Event Information

1.1 Scope of work

Open Tenders are invited through e-tender bidding process from interested and eligible bidders for entering into a Rate Contract valid for a period of **1 Year** as defined below:

Tender Enquiry No.	Work Description	EMD (Rs.)	Tender Fee (Inclusive of GST) (Rs.)	Last Date and Time for payment of Tender Fee
NIT Number: TPSODL/OT/2 1-22/057	Rate Contract for supply of Control cables and Power Cable for the period of One Year	2 Lakh	5,000	18.10.2021, 18:00 Hrs

1.2 Availability of Tender Documents

Please refer "Procedure to participate in the e-tender".

1.3 Calendar of Events

(a)	Last Date of receipt of Tender Fee	18.10.2021; 18:00 Hrs
(b)	Date & Time of Pre-Bid Meeting (If any)	Not Applicable
(c)	Last Date of receipt of pre-bid queries, if any	18.10.2021 up to 17:00 Hours
(d)	Last Date of Posting Consolidated replies to all the pre-bid queries as received	22.10.2021 up to 17:00 Hours
(e)	Last date and time of receipt of Bids	29.10.2021 up to 17:00 Hours
(f)	Date & Time of opening technical bids & EMD	29.10.2021 up to 18:00 Hours
(g)	Date & Time of opening of Price of qualified bids	Will be notified to the successful bidders through our website / e-mail.

Note: - In the event of last date specified for submission of bids and date of opening of bids is declared as a closed holiday for TPSODL, the last date of submission of bids and date of opening of bids will be the following working day at appointed times.

1.4 Mandatory documents required along with the Bid

- 1.4.1 EMD of requisite value and validity
- 1.4.2 Tender Fee in case the tender is downloaded from website
- 1.4.3 Requisite Documents for compliance to Qualification Criteria mentioned in Clause 1.7.
- 1.4.4 Drawing, Type Test details along with a sample of each item as specified at Annexure I (as applicable)
- 1.4.5 Duly signed and stamped 'Schedule of Deviations' as per Annexure III on bidder's letter head.
- 1.4.6 Duly signed and stamped 'Schedule of Commercial Specifications' as per Annexure IV on bidder's letter head.
- 1.4.7 Proper authorization letter/ Power of Attorney to sign the tender on the behalf of bidder.
- 1.4.8 Copy of PAN, GST, PF and ESI Registration (In case any of these documents is not available with the bidder, same to be explicitly mentioned in the 'Schedule of Deviations')



Please note that in absence of any of the above documents, the bid submitted by a bidder shall be liable for rejection.

1.5 Deviation from Tender

Normally, the deviations to tender terms are not admissible and the bids with deviation are liable for rejection. Hence, the bidders are advised to refrain from taking any deviations on this Tender. Still in case of any deviations, all such deviations shall be set out by the Bidders, clause by clause in the 'Annexure III - Schedule of Deviations' and same shall be submitted as a part of the Technical Bid.

1.6 Right of Acceptance/ Rejection

Bids are liable for rejection in absence of following documents: -

- 1.6.1 EMD of requisite value and validity
- 1.6.2 Tender fee of requisite value
- 1.6.3 Price Bid as per the Price Schedule mentioned in Annexure-I
- 1.6.4 Necessary documents against compliance to Qualification Requirements mentioned at Clause 1.7 of this Tender Document.
- 1.6.5 Filled in Schedule of Deviations as per Annexure III
- 1.6.6 Filled in Schedule of Commercial Specifications as per Annexure IV
- 1.6.7 Receipt of Bid within the due date and time

TPSODL reserves the right to accept/reject any or all the bids without assigning any reason thereof.

1.7 Qualification Criteria

- 1.7.1 The bidder should have an average annual turnover of Rs.5 Crores in any of last three financial years out of FY 17-18, FY 18-19, FY 19-20 and FY 20-21.
 - Copy of audited P&L Account to be submitted in this regard.
- 1.7.2 The Bidder should have supplied 100 km of similar or higher size & rating of cable during last 5 yrs. from the date of opening of technical bid Copy of work order / completion certificate to be submitted in this regard.
- 1.7.3 Bidder should have Performance Certificates for at least Two years satisfactory performance from minimum 2 reputed companies for similar or higher size & rating of cable. Out of these, one Certificate should be of more than 10 Kms of cable. The work against these issued certificates should be completed in last seven years from the date of bid submission. In case the bidder has previous association with Tata Power, for similar products and services, the performance feedback for that bidder by user group shall be considered.
- 1.7.4 Bidder should have own manufacturing facility to manufacture the cable of same or higher voltage rating. Bidder must submit undertaking in this regard.
- 1.7.5 Bidders must have full testing facilities for acceptance and routine test as per relevant IS/IEC. Bidder must submit undertaking in this regard



Note: In case the bidder has a previous association with TPSODL for similar products and services, the performance feedback for that bidder from TPSODL User Group shall only be considered irrespective of performance certificates issued by any third organization

1.8 Marketing Integrity

We have a fair and competitive marketplace. The rules for bidders are outlined in the General Condition of Contracts. Bidders must agree to these rules prior to participating. In addition to other remedies available, TPSODL reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the General Condition of Contracts. A bidder who violates the market place rules or engages in behavior that disrupts the fair execution of the marketplace, may result in restriction of a bidder from further participation in the marketplace for a length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- Failure to honor prices submitted to the marketplace
- Breach of terms as published in TENDER/NIT

1.9 Supplier Confidentiality

All information contained in this tender is confidential and shall not be disclosed, published or advertised in any manner without written authorization from TPSODL. This includes all bidding information submitted to TPSODL. All tender documents remain the property of TPSODL and all suppliers are required to return these documents to TPSODL upon request. Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

2.0 Evaluation Criteria

- The bids will be evaluated technically in compliance to tender terms and conditions
- The bids will be evaluated commercially on the overall all-inclusive lowest cost for the complete tender BOQ as calculated in Schedule of Items [Annexure I]
- TPSODL also, reserves right to split the order among more than one Bidder. Hence all bidders are advised to quote their most competitive rates against each line item.
- Bidder has to mandatorily quote against each item of Schedule of Items [Annexure I].
 Failing to do so, TPSODL may reject the bids.

NOTE: In case a new bidder is not registered with TPSODL, factory inspection and evaluation shall be carried out to ascertain bidder's manufacturing capability and quality procedures.

However, TPSODL reserves the right to carry out factory inspection and evaluation for any bidder prior to technical qualification.

In case a bidder is found as Disqualified in the factory evaluation, their bid shall not be evaluated any further and shall be summarily rejected. The decision of TPSODL shall be final and binding on the bidder in this regard.

2.1 Price Variation Clause: The prices as finalized shall remain firm during the entire contract period.



3.0 Submission of Bid Documents

3.1 Bid Submission

Bidders are requested to submit their offer in line with this Tender document. TPSODL shall respond to the clarification raised by various bidders and the replies will be sent to all participating bidders through e-mail.

Bids shall be submitted in 3 (Three) parts:

FIRST PART: "EMD" of Rs. 2,00,000 /- (Rupees Two Lakh only) shall be submitted.

The EMD shall be <u>valid for 210 days</u> from the due date of bid submission in the form of BG/Bankers Pay Order favoring 'TP Southern Odisha Distribution Limited", payable at Berhampur only. The EMD has to be strictly in the format as mentioned in General Condition of Contract, failing which it shall not be accepted and the bid as submitted shall be liable for rejection. EMD in the form of BG/Bankers Pay Order shall be required to be submitted only at the Office of HOD-Procurement as addressed hereunder-

TP SOUTHERN ODISHA DISTRIBUTION LIMITED

(A Tata Power and Odisha Government Joint Venture)

Procurement Department

Call Center / Training Center, Duduma Colony,

Ambagada, Berhampur, Odisha-760006

EMD May also be submitted through NEFT/ RTGS as per Bank details provided below with proper furnishing of submission details

A separate non-refundable tender fee of stipulated amount also needs to be transferred online through NEFT/ RTGS in case the tender document is downloaded from our website.

TPSODL Bank Details for transferring Tender Fee and EMD is as below:

Beneficiary Name - TP Southern Odisha Distribution Limited

Account No: 625901010050070

Type of Account: TPSODL Corporate Expenditure Account.

Name of the Bank: Union Bank of India, Kamapalli Branch, Berhampur.

IFSCode: UBIN0562599

SECOND PART: "TECHNICAL BID" shall contain the following documents:

- a) Documentary evidence in support of qualifying criteria
- b) Technical literature/GTP/Type test report etc. (if applicable)
- c) Qualified manpower available
- d) Testing facilities (if applicable)
- e) No Deviation Certificate as per the Annexure III Schedule of Deviations
- f) Acceptance to Commercial Terms and Conditions viz Delivery schedule/period, payment terms etc. as per the Annexure IV Schedule of Commercial Specifications.
- g) Quality Assurance Plan/Inspection Test Plan for supply items (if applicable)
- h) Acceptance of Annexure for Scope of work and Service level agreement.



The technical bid shall be properly indexed and is to be submitted through TPSODL E-tender platform (Ariba) only. Hard copy of Technical Bids need not be submitted.

THIRD PART: "PRICE BID" shall contain only the price details and strictly in format as mentioned in Annexure I along with explicit break up of basic prices, Taxes & duties, Freight etc. In case any discrepancy is observed between the item description stated in Schedule of Items mentioned in the tender and the price bid submitted by the bidder, the item descriptionas mentioned in the tender document (to the extent modified through Corrigendum issued if any) shall prevail.

Price Bid is to be submitted in soft copy through TPSODL E-Tendering system (Ariba) of Hard copy of Price Bid not be submitted

The EMD in the form of Bank Draft / BG / Bankers Pay Order shall be submitted in original hard copy and then placed in sealed envelope which shall be clearly marked as below:

EMD

"Rate Contract for Supply of Control cables and Power Cable for the period of One Year"

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and the TPSODL, shall be written in the English Language.

SIGNING OF BID DOCUMENTS:

The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

The Bid being submitted must be signed by a person holding a Power of Attorney authorizinghim to do so, certified copies of which shall be enclosed.

The Bid submitted on behalf of companies registered with the Indian Companies Act, for the time being in force, shall be signed by persons duly authorized to submit the Bid on behalf ofthe Company and shall be accompanied by certified true copies of the resolutions, extracts of Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the Bid on behalf of the Company.

Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with bid.

A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

The Bidder's n stated on the Proposal shall be the exact legal name of the firm.

3.2 Contact Information

All the bidders are requested to send their pre-bid queries (if any) against this tender through e-mail within the stipulated timelines. The consolidated reply to all the queries received shall be posted on TPSODL website by the stipulated timelines as detailed in calendar of events.



Communication Details:

Package Owner - Contracts

Name: Mr. Rajkishore Tripathy

Department: Procurement Contact No.: 9437967673

E-Mail ID: rajkishore.tripathy@tpsouthernodisha.com

HOD-Procurement

Name: Mr. Manoj Kumar Kharbanda

Contact No: 9971395197

E-Mail ID: manoj.kharbanda@tpsouthernodisha.com

<u>Chief – Procurement & Stores:</u>

Name: Mr. Subrata Dey

E-Mail ID: subrata.dey@tpsouthernodisha.com

Bidders are strictly advised to communicate with Package Owner through TPSODL E-tender System (Ariba) only. They need to pay Tender Participation Fee to receive the Ariba log-in.

3.3 Bid Prices

Bidders shall quote for the entire Scope of Supply/ work with a break up of prices for individual items and Taxes & duties. The bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total price with taxes, duties & freight up to destination at various sites of TPSODL. The all-inclusive prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during the execution of the supply work, breakup of price constituents.

The quantity break up shown else-where other than Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any items not indicated in the price schedule but which are required to complete the job as per the Technical Specifications/ Scope of Work/ SLA mentioned in the tender, shall be deemed to be included in prices quoted.

Applicable GST to be specified clearly.

The quantity break up shown else-where other than Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any items not indicated in the price schedule but which are required to complete the job as per the Technical Specifications/ Scope of Work/ SLA mentioned in the tender, shall be deemed to be included in prices quoted.

3.4 Bid Currencies

Prices shall be quoted in Indian Rupees Only.



3.5 Period of Validity of Bids

Bids shall remain valid for 180 days from the due date of submission of the bid.

Notwithstanding clause above, the TPSODL may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and responses thereto shall be made in writing.

3.6 Alternative Bids

Bidders shall submit Bids, which comply with the Bidding documents. Alternative bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the bidding documents.

3.7 Modifications and Withdrawal of Bids

The bidder is not allowed to modify or withdraw its bid after the Bid's submission. The EMD as submitted along with the bid shall be liable for forfeiture in such event.

3.8 Earnest Money Deposit (EMD)

The bidder shall furnish, as part of its bid, an EMD amounting as specified in the tender. The EMD is required to protect TPSODL against the risk of bidder's conduct which would warrant forfeiture.

The EMD shall be denominated in any of the following form:

- Banker's Cheque/ Demand Draft/ Pay order drawn in favor of TP Southern Odisha Distribution Limited payable at Berhampur.
- Online transfer of requisite amount through NEFT/ RTGS.
- Bank Guarantee valid for 210 days after due date of submission.

The EMD shall be forfeited in case:

a) The bidder withdraws its bid during the period of specified bid validity.

Or

- b) The successful Bidder does not
 - a) accept the Purchase Order, or
 - b) furnish the required Performance Security Bank Guarantee

3.9 Type Tests (if applicable)

The type tests specified in TPSODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/reject such bids rests with TPSODL.

4.0 Bid Opening & Evaluation process

4.1. Process to be confidential

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence the TPSODL's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.



4.2. Technical Bid Opening

Bids shall be opened as per the schedule mentioned in Calendar of Events. In case of limited tenders, the bids shall be opened internally by TPSODL. Owing to COVID Scenario, in case of Open Tenders also, the bids shall be opened internally by TPSODL. Technical bid must not contain any cost information whatsoever.

First the "EMD" will be checked. Bids without EMD/ cost of tender (if applicable) of required amount/ validity in prescribed format, shall be rejected.

Next, the technical bid of the bidders who have furnished the requisite EMD will be opened, one by one. The salient particulars of the techno commercial bid will be read out at the sole discretion of TPSODL.

4.3. Preliminary Examination of Bids/Responsiveness

TPSODL will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order. TPSODL may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

Prior to the detailed evaluation, TPSODL will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.

Bid determined as not substantially responsive will be rejected by the TPSODL and/or the TPSODL and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

4.4. Techno Commercial Clarifications

Bidders need to ensure that the bids submitted by them are complete in all respects. To assist in the examination, evaluation and comparison of Bids, TPSODL may, at its discretion, ask the Bidder for a clarification on its Bid for any deviations with respect to the TPSODL specifications and attempt will be made to bring all bids on a common footing. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted owing to any clarifications sought by TPSODL. After all techno commercial issues are clarified, the date of price bid opening will be intimated to the technically accepted bidders and same shall also be notified at TPSODL website.

4.5. Price Bid Opening

Price bids will be opened at the stipulated date and time. The EMD of the bidder withdrawing or substantially altering his offer at any stage after the technical bid opening will be forfeited at the sole discretion of TPSODL without any further correspondence in this regard.

4.6. Reverse Auctions

TPSODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products/ services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached as Annexure VI of this document. The bidders along with the tender document shall mandatorily submit a duly



signed copy of the Acceptance Form attached as Annexure VI as a token of acceptance for the same.

5.0 Award Decision

TPSODL will award the contract to the successful bidder whose bid has been determined to be the lowest-evaluated responsive bid as per the Evaluation Criterion mentioned at Clause 2.0. The Cost for the said calculation shall be taken as the all-inclusive cost quoted by bidder in Annexure I (Schedule of Items) subject to any corrections required in line with Clause 4.3 above. The decision to place purchase order/LOI solely depends on TPSODL on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that TPSODL may deem relevant.

TPSODL reserves all the rights to award the contract to one or more bidders so as to meet the delivery requirement or nullify the award decision without assigning any reason thereof.

In case any supplier is found unsatisfactory during the delivery process, the award will be cancelled and TPSODL reserves the right to award other suppliers who are found fit.

6.0 Order of Preference/Contradiction

In case of contradiction in any part of various documents in tender, following shall prevail in order of preference:

- 1. Schedule of Items (Annexure I)
- 2. Post Award Contract Administration (Clause 7.0)
- 3. Submission of Bid Documents (Clause 3.0)
- 4. Scope of Work and SLA (Annexure II)
- 5. Acceptance Form for Participation in Reverse Auction (Annexure VI)
- 6. General Conditions of Contract (Annexure VII)

7.0 Post Award Contract Administration

7.1. Special Conditions of Contract

- Rate contract shall be valid for a period of 1 year from the placement of Contract.
 Release Order (RO) shall be placed as per the requirement of TPSODL. Rate shall remain FIRM till the validity of Rate Contract.
- Monthly Capacity for order handling shall be submitted by the bidder and the same shall be utilized and decided by TPSODL for order placement.
- Business Associate (BA) shall submit applicable Performance Bank Guarantee as per GCC within 30 days of issuance of Rate Contract. PBG applicable shall be 5% of RC Value. PBG submitted, shall be released after completion of applicable guarantee period plus one month.
- Any change in statutory taxes, duties and levies during the contract period shall be borne by TPSODL. However, in case of delay in work execution owing to reasons not attributable to TPSODL, any increase in total liability shall be passed on the Bidder, whereas any benefits arising owing to such statutory variation in taxes and duties shall be passed on TPSODL.
- Statutory Variations: Any changes in existing taxes/ Duties and levies, Introduction of new taxes and duties etc. during the period of the contract shall be paid at actuals to BA subject to BA shall submit the tax break up in details, however, where BA has quoted the all-inclusive prices and not shown the tax break-up, this clause will not be applicable. The date of issue of MDCC shall be used for this purpose.
- Quotation in all BOM items is mandatory, and bid shall be rejected if any line item of BOQ is found blank in un price bid
- All the terms and conditions of TPSODL GCC- Supply shall be applicable.



7.2 Delivery Timelines

The cable shall be delivered within 45 days from the placement of RO.

7.3 Payment Terms

On delivery of the materials in good condition and certification of acceptance by certified official Associate shall submit the Bills/ Invoices in original in the name of TPSODL. The payment shall be released within 45 days from the date of submission of certified bills/ invoices.

7.4 Drawing Submission and Approval

The relevant drawings and GTPs need to be submitted within two weeks of receipt of firm purchase order by the successful bidder to TPSODL for approval. In case, re-submission of drawings is required on request of TPSODL, same needs to be submitted back to TPSODL within 5 days of such request.

7.5 Warranty Period

As Per Technical Specification.

7.6 Climate Change

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change.

7.7 Ethics

- TPSODL is an ethical organization and as a policy TPSODL lays emphasis on ethical practices across its entire domain. Bidder should ensure that they should abide by all the ethical norms and in no form either directly or indirectly be involved in unethical practice.
- TPSODL work practices are governed by the Tata Code of Conduct which emphasizes on the following:
- We shall select our suppliers and service providers fairly and transparently.
- We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
- Our suppliers and service providers shall represent our company only with duly authorized written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
- We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
- We respect our obligations on the use of third-party intellectual property and data.

Bidder is advised to refer GCC attached at Annexure IX for more information.



Any ethical concerns with respect to this tender can be reported to the following e-mail ID: mpkulkarni@tpsouthernodisha.com with cc to manoj.kharbanda@tpsouthernodisha.com

8.0 Scope of job and Service Level Agreement (SLA)

As per Annexure I and II.

9.0 General Condition of Contract

Any condition not mentioned above shall be applicable as per GCC for Supply attached along with this tender at Annexure IX.

10.0 Safety

- 11.0 Safety related requirements as mentioned in our safety Manual put in the Company's website which can be accessed by:
- 12.0 http://www.tpsouthernodisha.com
- 13.0 All Associates shall strictly abide by the guidelines provided in the safety manual at all relevant stages during the contract period.
- 14.0 All jobs in this tender have to be executed strictly in compliance to the Safety terms and Conditions of TP Southern Odisha Distribution Limited. Please refer attached Safety terms and conditions, Annexure-X, for details. Violation of Safety norms will result in Penalty as mentioned in the above document.



<u>ANNEXURE I</u>

Schedule of Items

SL NO	Item Description	Qty.	UOM	HSN/ SAC Code	Unit Price (Rs. /M)	GST (Rs/ Unit)	All incl. Unit Price (Rs. /M)	All incl. BOQ Value (Rs.)
1	CABLE CONTROL1.1KV 2CX2.5 SQMM CU ARM PVC	8,000	Meter					
2	CABLE CONTROL 1.1KV 2CX4 SQMM CU ARM	8,000	Meter					
3	CABLE CONTROL 1.1KV CU PVC 4Cx2.5MM2 ARM	12,000	Meter					
4	CABLE CONTROL 1.1KV CU PVC 6Cx2.5MM2 ARM	8,000	Meter					
5	CABLE CONTROL 1.1KV CU PVC 7Cx2.5MM2 ARM	3,000	Meter					
6	CABLE CONTROL 1.1KV CU PVC 19Cx2.5SQ ARM	8,000	Meter					
7	CABLE 1.1KV AL 4CX 25 SQMM XLPE ARMORED	10,000	Meter					
8	CABLE 1.1KV AL 4CX 35 SQMM XLPE ARMORED	2,000	Meter					
	All incl. BOQ Value (Rs.)							

NOTE:

- The quantity mentioned above is for evaluation purpose only and may vary during the execution. Release Orders against this Rate Contract shall be issued by TPSODL as per actual requirement.
- The bidders are advised to quote prices strictly in the above format and for all the line items as mentioned above. Failing to do so, bids are liable for rejection.
- The bidder must fill each and every column of the above format. Mentioning "extra/inclusive" in any of the column may lead for rejection of the price bid.
- No cutting/ overwriting in the prices is permissible.
- The prices shall be FOR TPSODL Locations. Exact delivery location shall be specified in the Release Order.
- HSN/SAC Code for respective line item must be mandatorily provided where ever applicable.



ANNEXURE II

SCOPE OF WORK AND SERVICE LEVEL AGREEMENT

<u>NA</u>



ANNEXURE III

Schedule of Deviations

Bidders are advised to refrain from taking any deviations on this TENDER. Still in case of any deviations, all such deviations from this tender document shall be set out by the Bidders, Clause by Clause in this schedule and submit the same as a part of the **Technical Bid.**

Unless <u>specifically</u> mentioned in this schedule, the tender shall be deemed to confirm the TPSODL's specifications:

S. No.	Clause No.	Tender Clause Details	Details of deviation with justifications

By signing this document we hereby withdraw all the deviations whatsoever taken anywhere in this bid document and comply to all the terms and conditions, technical specifications, scope of work etc. as mentioned in the standard document except those as mentioned above.

Seal of the Bidder:		
Signature:		
Name:		



ANNEXURE IV

Schedule of Commercial Specifications

(The bidders shall mandatorily fill in this schedule and enclose it with the offer Part I: Technical Bid. In the absence of all these details, the offer may not be acceptable.)

Particulars	Remarks
Prices firm or subject to variation	Firm / Variable
•	
·	
, ,	Yes / No
	%
Inclusive of GST	Yes / No (If Yes, indicate % rate)
Inclusive of transit insurance	Yes / No
Delivery	Weeks / months
	Yes / No
Terms of payment acceptable	Yes / No
Performance Bank Guarantee acceptable	Yes / No
Liquidated damages clause acceptable	Yes / No
Validity (180 days)	Yes / No
(From the date of opening of bid)	
Inspection during stage of manufacture	Yes / No
Rebate for increased quantity	Yes / No (If Yes, indicate value)
Change in price for reduced quantity	Yes / No (If Yes, indicate value)
Covered under Small Scale and Ancillary	Yes / No
Industrial Undertaking Act 1992	(If Yes, indicate, SSI Reg'n No.)
	Seal of the Bidder:
	Signature:
	Name:
	Prices firm or subject to variation (If variable indicate the price variation clause with the ceiling if applicable) If variable price variation on clause given Ceiling Inclusive of GST Inclusive of transit insurance Delivery Guarantee clause acceptable Terms of payment acceptable Performance Bank Guarantee acceptable Liquidated damages clause acceptable Validity (180 days) (From the date of opening of bid) Inspection during stage of manufacture Rebate for increased quantity Change in price for reduced quantity Covered under Small Scale and Ancillary



ANNEXURE V

Checklist of all the documents to be submitted with the Bid

Bidder has to mandatorily fill in the checklist mentioned below:-

S. No.	Documents attached	Yes / No / Not Applicable
1	EMD of required value	
2	Tender Fee as mentioned in this tender	
3	Signed copy of this tender as an unconditional acceptance	
5	Duly filled schedule of commercial specifications (Annexure IV)	
6	Sheet of commercial/technical deviation if any (Annexure III)	
7	Balance sheet for the last completed three financial years; mandatorily enclosing Profit & loss account statement	
8	Acknowledgement for Testing facilities if available (duly mentioned on bidder letter head)	
9	List of Machine/tools with updated calibration certificates if applicable	
10	Details of order copy (duly mentioned on bidder letter head)	
11	Order copies as a proof of quantity executed	
12	Details of Type Tests if applicable (duly mentioned on bidder letter head)	
13	All the relevant Type test certificates as per relevant IS/IEC (CPRI/ERDA/other certified agency) if applicable	
14	Project/supply Completion certificates	
15	Performance certificates	
16	Client Testimonial/Performance Certificates	
17	Credit rating/solvency certificate	
18	Undertaking regarding non blacklisting (On company letter head)	
19	List of trained/untrained Manpower	

Seal of the Bidder:
Signature:
Name



ANNEXURE VI

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder)

In a bid to make our entire procurement process fairer and more transparent, TPSODL intends to use the reverse auctions as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

- 1. TPSODL shall provide the user id and password to the authorized representative of the bidder. (Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).
- 2. TPSODL will make every effort to make the bid process transparent. However, the award decision by TPSODL would be final and binding on the supplier.
- **3.** The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPSODL, bid process, bid technology, bid documentation and bid details.
- **4.** The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
- 5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPSODL.
- 6. In case of intranet medium, TPSODL shall provide the infrastructure to bidders. Further, TPSODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
- 7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out-rightly rejected by TPSODL.
- 8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
- **9.** The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPSODL site.
- **10.** The prices submitted by a bidder during the auction event shall be binding on the bidder.
- 11. No requests for time extension of auction event shall be considered by TPSODL.
- **12.** The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all-inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder



ANNEXURE-VII

Attached: Technical Specifications



Annexure VIII

Attached-General Condition of Contract

TPSØDL	TECHNICAL SPECIFICATION TECHNICAL SPECIFICATION			
Doc. Title	SPECIFICATION	FOR CONTROL CABLES	S	
Doc. No	ENG-LV-34-01		Eff. Date: 01.03.2021	
Rev. No	01		Page 1 of 18	
Prepared by:	Reviewed By:	Approved By:	Issued By:	

CONTENTS

- 1.0 SCOPE
- 2.0 APPLICABLE STANDARDS
- 3.0 CLIMATIC CONDITIONS OF THE INSTALLATION
- 4.0 GENERAL TECHNICAL REQUIREMENTS
- 5.0 GENERAL CONSTRUCTIONS
- 6.0 NAME PLATE AND MARKING
- 7.0 TESTS
- 8.0 TYPE TEST CERIFICATES
- 9.0 PRE-DISPATCH INSPECTION
- 10.0 INSPECTION AFTER RECEIPT AT STORE
- 11.0 GUARANTEE
- 12.0 PACKING
- 13.0 TENDER SAMPLE
- 14.0 QUALITY CONTROL
- 15.0 MINIMUM TESTING FACILITIES
- 16.0 MANUFACTURING ACTIVITIES
- 17.0 SPARES, ACCESSORIES AND TOOLS
- 18.0 DRAWING AND DOCUMENTS
- 19.0 GUARANTEED TECHNICAL PARTICULARS
- 20.0 SCHEDULE OF DEVIATIONS

Initiator	HoG (Plant Engineering)	

TDCADI	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED,				
TPSØDL	ODISHA				
V	TECHNICAL SPECIFICATION				
Doc. Title	SPECIFICATION F	OR CONTROL CABLES	6		
Doc. No	ENG-LV-34-01		Eff. Date: 01.03.2020		
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1.0	SCOPE	This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site/store and performance of Control Cables for trouble free and efficient operation.				
		manufactured and teste	this specification shall unled in accordance with the later and shall conform to the results.	atest editions of the followi	ng Indian,	
		IS-1554 (Part-I)	IS-1554 (Part-I) PVC insulated (heavy duty) electric of			
		IS-8130:1984	Conductor for insulated e	lectric cables & flexible cords		
		IS-5831:1984	PVC insulation and shea	th of electric cables		
2.0	APPLICABLE STANDARDS	IEC-60228/3-2004	Conductor of insulated ca	ables		
		IEC 60332-1:1993	Flame retardant, characte	eristics of electrical cables.		
		IS-3975:1979	Mild steel wires strips and	d tapes for armoring cables.		
		IS:3961-(Part-2)	Recommended current ra	atings for cables		
		IS 10418: 1982	Drums for Electric Cables	3		
3.0	CLIMATIC CONDITIONS OF THE INSTALLATION	1. Maximum altitude abo 2. Maximum ambient air 3. Maximum daily averag 4. Minimum ambient air t 5. Maximum relative hum 6. Average number of the 7. Average number of rai 8. Average annual rainfa 9. Earthquakes of an incolor 0.3g 10. Earthquakes of an incolor 0.15g (g being acceleration due 11. Wind velocity: 160 km/hr. Environmentally, some of subject to high relative frequently be salt laden. pollution conditions for areas. Therefore, Outdoor mat exposed, heavily polluted.	temperature le ambient air temperature emperature lidity understorm days per annum (inny days per annum ll tensity in horizontal direction intensity in vertical direction et to gravity) If the regions, where the work humidity, which can give rise On occasions, the combinatio outdoor insulators. Some pla derial and equipment shall be derial and accessories shall be	sokeraunic level) - equivalent to seismic accessory - equivalent to seismic accessory 300 km/hr, 200 will take place includes coase to condensation. Onshore on of salt and condensation reaces are in heavily industriated edesigned and protected coastal atmosphere	eleration of km/hr and stal areas, winds will nay create al polluted	
	Initiator		HoG (Plant Engineering)		1	
					İ	

TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA				
V		CIFICATION			
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Prepared by:	Reviewed By:	Approved By:	Issued By:		

		S No	DESRIPTION	UNITS	REQUIREMENT					
		1	Reference Standard		IS:1554, Pa	art-1/1988 in	n Genera	al		
		2	Voltage grade		1.1 KV					
		3	Type of cable		Control Cat	ole				
		Α	Size of cable	sq.mm	1C*2.5	2C*2.5	2C*4	2C*6	4C*2.5	
		1	Conductor			1		1		
		a.	Conductor Material			Plain	Anneale	ed Copp	er	
		b.	No. of cores	Nos.	1	2	2	2	4	
		C.	Size of conductor	sq.mm.	2.5	2.5	4	6	2.5	
		d.	Shape of conductor		Stranded circular					
4.0	GENERAL TECHNICAL REQUIREMENTS	e.	No. & diameter of each wire in conductor		Minimum size shall be corresponding to meet the requirement of conductor resistance as per relevant clause of IS:8130-1984				e as per relevant	
		2	Insulation							
		a.	Material		PVC insulation 1984 applies				s per IS: 5831-	
		b.	Nominal thickness	mm	0.9	0.9	0.9	0.9	0.9	
		C.	Core identification		NA	Red & Black	Red & Black	Red & Black	Red, Yellow, Blue & Black	
		3	Inner sheath							
		a.	Material			PVC		ing to ty :5831-1	pe ST-2 as per 984	
		b.	Minimum thickness (at any point of measurement)	mm	Not applicable	0.3	0.3	0.3	0.3	
		4	Armour				<u>'</u>			
		a.	Material		Not applicable	Galvaniz		el round :3975-1	wire confirming to	

Initiator	HoG (Plant Engineering)	

TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA				
7	TECHNICAL SPECIFICATION				
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 11		T		T	1		
b	Nominal Diameter	mm		1.4	1.4	1.4	1.4
C	Туре			Wire	Wire	Wire	Wire
5	Outer Sheath						
a	Material		FRLS PV			ided type S Prope	e as per IS:5831- rties)
b	Color			•	Blu	<u></u> е	
c	Minimum thickness (at any point of measurement)	mm	1.80	1.24	1.24	1.24	1.24
6	Diameter						
а	diameter	mm	7.5	15.0	16.5	19.0	17.0
b	Tolerance of diameter	mm	±3	±3	±3	±3	±3
7	one second	kA	0.2875	0.2875	0.46	0.69	0.2875
8	cable	Kg/km	90	500		750	600
9	Standard length of cable drum with tolerance	m	500±5% / 1000±5%				
10	Allowable conductor	°C	70	70	70	70	70
11	Allowable conductor temperature during short circuit	°C	160	160	160	160	160
12	Max. DC resistance at 20°C – Main	Ohm/km	7.41	7.41	4.61	3.08	7.41
13	Operating temp.	Ohm/km	8.89	8.89	5.53	3.7	8.89
14	Guaranteed value of min oxygen index at 27°C	%	29	29	29	29	29

Initiator	HoG (Plant Engineering)	

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TPSØDL	ODISHA			
V	TECHNICAL SPECIFICATION			
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15	Guaranteed value of min. temp. index at 21 oxygen index	°C	250	250	250	250	250
16	Smoke Density Rating			Max.	averag	e 60 SD	R

S No	DESCRIPTION	UNITS	REQUIREMENT				
В	Size of cable	sq.mm	4C*4	6C*2.5	7C*2.5	10C*2.5	12C*2.5
1	Conductor	34.11111	404	00 2.0	70 2.0	100 2.0	120 2.0
a.	Conductor Material		Plain Annealed Copper				
b.	No. of cores	Nos.	4	6	7	10	12
c.	Size of conductor	sq.mm.	4	2.5	2.5	2.5	2.5
d.	Shape of conductor			Strande	ed circula		
e.	No. & diameter of each wire in conductor		Minimum size shall be corresponding to meet the requirement of conductor resistance as per relevant clause of IS:8130-1984				
2	Insulation						
a.	Material		PVC insulation of 1984 a		g to type extrusion		S: 5831-
b.	Nominal thickness	mm	0.9	0.9	0.9	0.9	0.9
C.	Core Identification		Red, Yellow, Blue & Black All cores white with core numbers printed in black ink as per clause 10.3 of IS:1554(Part-I)/1988			clause	
3	Inner sheath						
a.	Material		PVC conformir	g to type	ST-2 as	oer IS:583	1-1984
b.	Minimum thickness (at any point of measurement)	mm	0.3	0.3	0.3	0.3	0.3
4	Armour						
a.	Material		Galvanized Steel	round wir	e confirm	ing to IS:39	975-1999
b.	Nominal Diameter	mm	1.4	1.4	1.4	1.6	1.6
C.	Туре		Wire	Wire	Wire	Wire	Wire
5	Outer Sheath						
a.	Material		FRLS PVC Type 198		truded ty RLS Prop		IS:5831-
b.	Color			E	Blue		
C.	Minimum	mm	1.24	1.24	1.24	1.4	1.4

Initiator HoG (Plant Engineering)

TPSØDL	TATA POWI	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA			
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S	DESCRIPTION	UNITS		REQU	IREMENT	Γ	
16	Smoke Density Rating			Max. aver	age 60 Sl	DR	
15	Guaranteed value of min. temp. index at 21 oxygen index	°C	250	250	250	250	250
14	Guaranteed	%	29	29	29	29	29
13	Max. AC resistance at	Ohm/km	5.53	8.89	8.89	8.89	8.89
12	Max. DC	Ohm/km	4.61	7.41	7.41	7.41	7.41
11	Allowable conductor temperature during short circuit	ů	160	160	160	160	160
10	Allowable conductor temperature at continuous current	°C	70	70	70	70	70
9	Standard length of cable drum with tolerance	m		500±5%	/ 1000±5	%	
8	Approx. Weight of cable	Kg/km	800	750	750	1100	1200
7	Short circuit capacity for one second	kA	0.46	0.2875	0.2875	0.2875	0.2875
b.	Tolerance of diameter	mm	±3	±3	±3	±3	±3
a.	Approx. overall diameter	mm	18	18	20	22	25
6	measurement) Diameter						
	thickness (at any point of						

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14C*2.5 19C*2.5

6C*4

4C*10 4C*16

sq.mm

S No

Size of cable

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1	Conductor						
a.	Conductor Material		F	Plain Annea	aled copper	_	Grade inum
b.	No. of cores	Nos.	14	19	6	4	4
C.	Size of conductor	sq.mm.	2.5	2.5	4	10	16
d.	Shape of conductor				Stranded circular		
e.	No. & diameter of each wire in conductor		Minimum size shall be corresponding to meet the requirement of conductor resistance as per relevant clause of IS:8130-1984				
2	Insulation						
a.	Material		PVC in		nforming to type C as plied by extrusion pro		5831-
b.	Nominal thickness	mm	0.9	0.9	1.0	0.9	0.9
C.	Core identification		with core printed in as per cla	es white numbers black ink ause 10.3 54(Part-	Red, Yellow, Blue, Black, Grey & Green		Yellow Black
3	Inner sheath						
a.	Material		PVC (conforming	to type ST-2 as per	IS:5831-1	1984
b.	Minimum thickness (at any point of measurement)	mm	0.3	0.3	0.3	0.3	0.3
4	Armour			I.			
a.	Material		Galvaniz	ed Steel ro	ound wire confirming	to IS:397	5-1999
b.	Nominal Diameter	mm	1.6	1.6	1.6	1.6	1.6
C.	Type		Wire	Wire	Wire	Wire	Wire
5	Outer Sheath						
a.	Material		FRLS P\		ST 2, extruded type (With FRLS Propertie		S:5831-
b.	Color			1001	Blue	/	
C.	Minimum thickness (at any point of measurement)	mm	1.4	1.4	1.4	1.4	1.4
6	Diameter						
	Approx. overall]			
a.	diameter Tolerance of	mm	27	28	22	22	23

Initiator	HoG (Plant Engineering)	

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		7	Short circuit capacity for one second	kA	0.2875	0.2875	0.46	0.76	1.216
		8	Approx. Weight of cable	Kg/km	1350	1487	1060	900	1100
		9	Standard length of cable drum with tolerance	m		5	00±5% / 1000±5%		
		10	Allowable conductor temperature at continuous current	°C	70	70	70	70	70
		11	Allowable conductor temperature during short circuit	°C	160	160	160	160	160
		12	Max. DC resistance at 20°C – Main	Ohm/km	7.41	7.41	4.61	3.08	1.91
		13	Max. AC resistance at max. Operating temp.	Ohm/km	8.89	8.89	5.53	3.7	2.29
		14	Guaranteed value of min oxygen index at 27°C	%	29	29	29	29	29
		15	Guaranteed value of min. temp. index at 21 oxygen index	°C	250	250	250	250	250
		16	Smoke Density Rating			Ma	ax. average 60 SDR		
5.0	GENERAL CONSTRUCTION	India: 5.2. <i>F</i>	he PVC Insulated n Standard IS 155 All material used in	4 (Part – I): the manufitended use Wrapping	1988 and i acturing of and shall g test (for a	ts latest an cables sha withstand t	nd tested strictly in acceptance of the strictly in acceptance of	oe selecte	ed as the
		coppe	er conductor, PVC	Insulated t	ype-C, ext	ruded PVC	(16 sq.mm. Cable: 1 inner sheath, galvan informing to IS:1554	nized rou	nd wire

Initiator	HoG (Plant Engineering)	

TPSODL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA			
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	T	
		amendment. Overall outer sheath in blue color.
		5.4 4CX10 sq.mm. and 4CX16 sq.mm. Cable: 1.1 kV stranded aluminium H4 grade
		conductor, PVC insulated type-C, extruded inner sheath, galvanized round wire armoured,
		extruded PVC outer sheathed FRLS cable conforming to IS:1554(Part-I) with latest
		amendment. Overall outer sheath in blue color.
5.1	AROURING	The armouring shall be with galvanized steel wires for multi core cables. The galvanized steel wires shall comply with the requirements of IS: 3975 with latest amendments.
		whes shall comply with the requirements of 13. 3973 with latest amendments.
		The Outer Sheath shall be of polyvinyl chloride (PVC) compound confirming to the
		requirements of Type ST1 of IS: 5831 with FRLS properties with latest amendments. The
5.2	OUTER SHEATH	outer sheath shall be applied by extrusion process.
		The thickness of the outer sheath shall be as per IS: 1554(Part – I). No tolerance on the negative side shall be acceptable.
	CORE	Individual core of multi-core cable shall be colour-coded and/or numbered for proper
5.3	IDENTIFICATION	identification in accordance with relevant IS/manufacturer's standard.
		Cables shall be supplied in the wooden drums in specified length. Wooden drums shall be
5.4	REELS/DRUMS	strong, weatherproof and non-returnable. The ends of the cable shall be sealed by means of
		non-hygroscopic sealing material.
		Drum: Wooden drums shall be of good quality. It shall be free from any damages & sharp
		edges of nails/ hardware inside the drums. A protective covering of polymeric sheet shall be
		applied inside the drum before winding the cable on the drum.
		The drum shall carry the following information stenciled on both sides of the drum: a) Manufacturer's name
		b) Type of Cable
		c) Voltage Grade
		d) Number of cores
		e) Nominal Cross sectional Area
		f) Length of the cable on the drum
		g) Number of lengths on the drum (If more than one)
		h) Direction of the rotation of the drum
		i) Gross mass
		j) ISI Certification mark
6.0	MARKING	The following details shall be embossed on the outer sheath of the cable at regular
		intervals every meter.
		a) Manufacturer's name
		b) Voltage grade
		c) Number of cores, size, type
		d) FRLSH
		e) Property of TPSODL, ODISHA
		f) IS Reference
		g) ISI Mark
		h) PO Number
		i) Material code
		j) Year of manufacturing
		k) Sequential length marking shall be provided on the outer sheath of the cable by
		printing. All routine, acceptance & type tests shall be carried out in accordance with the relevant
		IS/IEC. All routine/acceptance tests shall be witnessed by TPSODL authorized
7.0	TESTS	representative. All the components shall also be type tested as per the relevant standards.
		Following tests shall be necessarily conducted on the 1.1 kV control cables in addition to
Γ	Initiator	HoG (Plant Engineering)
	ıııllatul	Flog (Flant Engineening)

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		others specified in IS/IEC standards.
		A. Tests on Conductor - Conductor Resistance test
		B. Test for round steel wires/armouring wires
		C. Test for thickness of insulation and sheath(outer and inner)
		D. Physical tests for insulation & outer sheath
		i) Tensile strength and elongation at break
		ii) Ageing in air oven
7.1	TYPE TEST	iii) Hot deformation
7.1	111 6 1631	iv) Shrinkage test
		v) Loss of mass in air oven
		vi) Heat shock test
		vii) Thermal stability
		E. Insulation Resistance test
		F. High voltage test (water immersion test) – AC & DC
		G. High voltage test at room temperature
		H. Flammability test
7.2	ROUTINE TEST	a) Conductor Resistance test
1.2	KOOTINE TEST	b) High Voltage test at room temperature
		a) Tensile Test (for aluminium)
		b) Annealing test (for copper)
		c) Wrapping Test (for aluminium)
7.3	ACCEPTANCE	d) Conductor Resistance Test
	TEST	e) Test for thickness of insulation and sheath
		f) Tensile strength and elongation at break test for insulation and sheath
		g) High Voltage test at room temperatureh) Insulation resistance test
		h) Insulation resistance test The bidder shall furnish the type test certificates of the 1.1 kV Control cable for the tests as
		mentioned above as per the corresponding standards. All the tests shall be conducted at
		CPRI / ERDA / NABL Accredited Labs as per the relevant standards. Type test shall have
8.0	TYPE TEST	been conducted in certified Test Laboratories during the period not exceeding 5 years from
	CERTIFICATES	the date of opening the bid. In the event of any discrepancy in the test reports i.e. any test
		report not acceptable or any/all type tests (including additional type tests, if any) not carried
		out, same shall be carried out without any cost implication to TPSODL.
		The Material shall be subject to inspection by a duly authorized representative of the
		TPSODL. Inspection may be made at any stage of manufacture at the discretion of TPSODL and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to
		rejection. Bidder shall grant free access to the places of manufacture to TPSODL's
		representatives at all times when the work is in progress. Inspection by TPSODL or its
	DDE DECDATOU	authorized representatives shall not relieve the bidder of his obligation of furnishing equipment
9.0	PRE-DESPATCH INSPECTION	in accordance with the specifications. Material shall be dispatched after specific MDCC
	INSELCTION	(Material Dispatch Clearance Certificate) is issued by TPSODL.
		Following documents shall be sent along with material
		a) Test reports
		b) MDCC issued by TPSODLc) Invoice in duplicate
<u> </u>		o) hivoice in duplicate

Initiator	HoG (Plant Engineering)	

TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA			
V	TECHNICAL SPECIFICATION			
Doc. Title	SPECIFICATION	FOR CONTROL CABLES		
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		d) Packing list e) Drawings & catalogue	
		e) Drawings & catalogue f) Guarantee / Warrantee card	
		g) Delivery Challan	
		h) Other Documents (as applicable).	
	INSPECTION	The material received at TPSODL store shall be inspected for acceptance and shall be liable	
10.	AFTER RECEIPT	for rejection, if found different from the reports of the pre-dispatch inspection and one copy of	
	AT STORES	the report shall be sent to Project Engineering department.	
11.0	GUARANTEE	Bidder shall stand guarantee towards design, materials, workmanship & quality of process / manufacturing of items under this contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by TPSODL, up to a period of at least 12 months from the date of commissioning or 24 months from the date of last supplies made under the contract whichever is later, (the time scale of 12/24 months could be enhanced subject to mutual agreements). Bidder shall be liable to undertake to replace/rectify such defects at its own costs, within mutually agreed time frame, and to the entire satisfaction of TPSODL, failing which TPSODL will be at liberty to get it replaced/rectified at Bidder's risks and costs and recover all such expenses plus the TPSODL's own charges (@ 20% of expenses incurred), from the Bidder or from the "Security cum Performance Deposit" as the case may be. Bidder shall further be responsible for 'free replacement' for another period of FOUR years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by	
		TPSODL.	
		The cable shall be wound on strong weatherproof and non-returnable wooden drums packed in coil lengths of 500 meters/1000 meters in line with the requirement of	
	PACKING	IS 10418 – 1982 and its latest amendments. The ends of the cable shall be sealed by	
12.0		means of non-hygroscopic sealing material.	
		Bidder shall ensure that cable covered under this specification shall be prepared for rail/road	
		transport in a manner so as to protect the equipment from damage in transit	
13.0	TENDER SAMPLE	Bidder shall have to submit the sample of material (1 meter length) with the offer (in case of	
13.0	TENDER SAWIFEE	first supply to TPSODL).	
14.0	QUALITY CONTROL	The bidder shall submit with the offer Quality assurance plan indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection withing the parameters of the delivery schedule shall be furnished.	
4	MINIMUM TESTING	Bidder shall have adequate in house testing facilities for carrying out all routine tests &	
15.0	FACILITIES	acceptance tests as per relevant International / Indian standards.	
	MANUEACTURING	The successful bidder will have to submit the bar chart for various manufacturing activities clearly elaborating each stage, with quantity. This bar chart should be in line with the Quality	
16.0	MANUFACTURING ACTIVITIES	assurance plan submitted with the offer. This bar chart will have to be submitted within 15	
	ACTIVITIES	days from the release of the order.	
	SPARES,		
17.0	ACCESSORIES	Not required	
	AND TOOLS		
	DRAWINGS AND	Following documents shall be prepared based on TPSODL specifications and statutory	

Initiator	HoG (Plant Engineering)	

TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED,			
IPSUDL	ODISHA			
V	TECHNICAL SPECIFICATION			
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40.0	D00111151150		(to BOM 1 1	- 11 1	10 1 121	0 - 1 - 1	
18.0	DOCUMENTS		nents with comple a) Completely fil b) General desc	lled-in Technic	al Parame	eters		ncluding brochures
			c) Type test Cer		quipinent	and an con	iponenta ii	icidaling brochares
			d) Experience L	ist.				
			,	al diagram of t				atus at
		S	Drawings/Documer Description	ents to be subr	For		r Review	Tract: Final Submission
		No			Approv		i Keview	Final Submission
					1 4 4 4 4		ormation	
		1	Technical Para		V			V
		2	Manual/Catalo		;		$\sqrt{}$	
		3	for all compon- Installation Ins				√	√
		4	Cross section		F V		•	√
			the cable	a. a.a.g.a	,			·
		5	Instruction for				1	V
		6	Transport/ship				V	V
		7	dimension dra		√ V		√	√
		8		ceptance and				, v
			Type test Cert					
			of all relevant dra	e order, the su wings/Docume	uccessful ents for TP	bidder will SODL app	be require roval.	d to furnish two copion
				ntenance instr	uctions a			ation pertaining to th
		S No	DESRIPTION	UNITS		Re	quiremen	t
		1	Reference Standard IS:1554,Part- 1/1988 in General			To be fui	rnished by	bidder
		2	Voltage grade					
19.0		3	Type of cable					
		Α	Size of cable	sq.mm	1C*2.5	2C*2.5	2C*6	4C*2.5
		1	Conductor					
		a.	Conductor Material			To be fu	nished by	bidder
		b.	No. of cores	Nos.				

TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA				
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	C.	Size of conductor	sq.mm.		
	d.	Shape of conductor			
	e.	No. & diameter of each wire in conductor			
	2	Insulation			
	a.	Material			
	b.	Nominal thickness	mm		
	C.	Core Identification			
	3	Inner sheath			
	a.	Material			
	b.	Minimum thickness (at any point of measurement)	mm		
	4	Armour			
	a.	Material			
	b.	Nominal Diameter	mm	To be furnished by bidder	
	C.	Туре			
	5	Outer Sheath			
	a.	Material			
	b.	Color			
	C.	Minimum thickness (at any point of measurement)	mm		
	6	Diameter			
	a.	Approx. overall diameter	mm		
	b.	Tolerance of diameter	mm		
	7	Short circuit capacity for one second	kA		
	8	Approx. Weight of cable	Kg/km		

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TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA TECHNICAL SPECIFICATION				
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	9	Standard length of cable drum with tolerance	m					
	10	Allowable conductor temperature at continuous current	°C					
	11	Allowable conductor temperature during short circuit	°C		Tol	oe furnishe	ed by bidder	
	12	Max. DC resistance at 20°C – Main	Ohm/km					
	13	Max. AC resistance at max. Operating temp.	Ohm/km					
	14	Guaranteed value of min oxygen index at 27°C	%					
	15	Guaranteed value of min. temp. index at 21 oxygen index	°C					
	16	Smoke Density Rating						
	S	DESCRIPTION	UNITS			REQUIR	FMFNT	
	No B	Size of cable	sq.mm	4C*4	6C*2.5	7C*2.5	10C*2.5	12C*2.5
	1	Conductor	34.11111	70 7	00 2.3	10 2.5	100 2.3	120 2.3
	a.	Conductor Material						
	b.	No. of cores	Nos.	To be furnished by bidder				
	C.	Size of conductor	sq.mm.					
	d.	Shape of conductor						
	e.	No. & diameter of each wire in conductor						
	2	Insulation						
	a.	Material						

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TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA				
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	b.	Nominal thickness	mm		
	C.	Core identification			
	3	Inner sheath			
	a.	Material			
	b.	Minimum thickness (at any point of measurement)	mm		
	4	Armour			
	a.	Material			
	b.	Nominal Diameter	mm		
	C.	Type			
	5	Outer Sheath			
	a.	Material		To be furnished by bidder	
	b.	Color			
	C.	Minimum thickness (at any point of measurement)	mm		
	6	Diameter			
	a.	Approx. overall diameter	Mm		
	b.	Tolerance of diameter	Mm		
	7	Short circuit capacity for one second	kA		
	8	Approx. Weight of cable	Kg/km		
	9	Standard length of cable drum with tolerance	М		
	10	Allowable conductor temperature at continuous current	°C		
	11	Allowable conductor temperature during short circuit	°C		
	12	Max. DC	Ohm/km		

TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED ODISHA				
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	20°C – Main		
13	Max. AC resistance at max. Operating temp.	Ohm/km	
14	Guaranteed value of min oxygen index at 27°C	%	To be furnished by bidder
15	Guaranteed value of min. temp. index at 21 oxygen index	°C	
16	Smoke Density Rating		

	rating	1	I				
S No	DESCRIPTION	UNITS		REQUIREMENT			
С	Size of cable	sq.mm	14C*2.5	19C*2.5	6C*4	4C*10	4C*16
1	Conductor						
a.	Conductor Material						
b.	No. of cores	Nos.					
C.	Size of conductor	sq.mm.					
d.	Shape of conductor						
e.	No. & diameter of each wire in conductor						
2	Insulation						
a.	Material						
b.	Nominal thickness	mm					
C.	Core identification			To be f	urnished	d by bidder	
3	Inner sheath						
a.	Material						
b.	Minimum thickness (at any point of measurement)	mm					
4	Armour						
a.	Material						
b.	Nominal Diameter	mm					
C.	Туре						

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PSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA			
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	5	Outer Sheath			
	a.	Material			
	b.	Color			
	C.	Minimum thickness (at any point of measurement)	mm		
	6	Diameter			
	a.	Approx. overall diameter	mm		
	b.	Tolerance of diameter	mm		
	7	Short circuit capacity for one second	kA		
	8	Approx. Weight of cable	Kg/km		
	9	Standard length of cable drum with tolerance	m		
	10	Allowable conductor temperature at continuous current	°C	To be furnished by bidder	
	11	Allowable conductor temperature during short circuit	°C		
	12	Max. DC resistance at 20°C – Main	Ohm/km		
	13	Max. AC resistance at max. Operating temp.	Ohm/km		
	14	Guaranteed value of min oxygen index at 27°C	%		
	15	Guaranteed value of min. temp. index at 21 oxygen index	°C		
	16	Smoke Density Rating			

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TPSØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, ODISHA TECHNICAL SPECIFICATION		
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We confirm that there are no deviations apart from those detailed above.

Seal of the Company

Signature :

Designation

Initiator	HoG (Plant Engineering)	

TATA POWER Doc. Title Tec.

TATA POWER

TECHNICAL SPECIFICATION

Technical Specification - 1.1 kV LT Power Cable of various sizes

Doc. No ENG-TATA POWER-Distribution-05 Eff. Date:26/03/19
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Prepared by:Reviewed By:Approved By:Issued By:Nandita RajuGagandeep KaurBrajanath DeyH C SharmaBhagyalakshmi NairSandeep KundargiNilesh PotphodeNilesh Potphode

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- 2.0 APPLICABLE STANDARDS
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- 4.0 GENERAL TECHNICAL REQUIREMENTS
- 5.0 GENERAL CONSTRUCTION
- 6.0 NAME PLATE AND MARKING
- 7.0 TESTS
- 8.0 TYPE TEST CERTIFICATES
- 9.0 PRE-DISPATCH INSPECTION
- 10.0 INSPECTION AFTER RECEIPT AT STORE
- 11.0 GUARANTEE
- 12.0 PACKING
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- 15.0 MINIMUM TESTING FACILITIES
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- 19.0 GURANTEED TECHNICAL PARTICULARS
- 20.0 SCHEDULE OF DEVIATIONS

	HOG	
Initiator	(Engineering)	

Doc. Title	Technical Specification - 1.1	Technical Specification - 1.1 kV LT Power Cables of various sizes		
Doc. No	ENG-TATA POWER-Distribut	ENG-TATA POWER-Distributions-05 Eff. Date: 26/03/19		
Rev. No	00	00		
Prepared by:	Reviewed By:	Approved By:	Issued By:	
Nandita Raju	Gagandeep Kaur	Brajanath Dey	H C Sharma	
Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode	

		This are a second	and a second of the second of the second	milioni anti- at distance as an estimate to the contract of th	
				quirements of design, manufacture, testing at manufacturer's pading at site/store of 1.1 kV LT XLPE Power Cable for trouble	
		free and efficier	0	dading at site/store or 1.1 kV LT ALFE Fower Cable for trouble	
		iroo ana omoloi	n operation.		
		Applicable for 1	.1 kV LT XLPE insulated Po	ower Cable of following sizes:	
			300 sq.mm. (Aluminium co		
		b) 4C X	240 sq.mm. (Aluminium co	onductor cable)	
			185 sq.mm. (Aluminium co		
			150 sq.mm. (Aluminium co		
		,	120 sq.mm. (Aluminium co	·	
		,	95 sq.mm. (Aluminium cor	•	
			50 sq.mm. (Aluminium cor		
			35 sq.mm. (Aluminium cor		
			25 sq.mm. (Aluminium cor		
1.0	SCOPE		16 sq.mm. (Aluminium cor 10 sq.mm. (Aluminium cor		
			50 sq. mm. (Aluminium co		
			25 sq. mm. (Aluminium co		
			16 sq. mm. (Aluminium co		
			10 sq. mm. (Aluminium co		
			4 sq. mm. (Aluminium con-		
			630 sq. mm. (Aluminium c		
		r) 1C X 300 sq. mm. (Aluminium conductor cable)			
		s) 1C X 185 sq. mm. (Aluminium conductor cable)			
		t) 1C X 95 sq. mm. (Aluminium conductor cable)			
			25 sq. mm. (Aluminium co		
			4 sq. mm. (Aluminium con		
			2.5 sq. mm. (Aluminium co		
			50 sq. mm. (Aluminium co		
-			50 sq. mm. (Copper condu		
				on shall unless otherwise stated, be designed, manufactured ditions of the following Indian, International standards / IEC	
			m to the regulations of the		
		and snan como	in to the regulations of the	iocai autilorities.	
		S. No.	Standards	Title	
				Specifications for Cross Linked Polyethylene PVC	
		1	IS-7098 (Part-I):1988	Sheathed Cables: Part 1-For Working Voltages up to and	
			, ,	including 1100 Volts	
	APPLICABLE	2	IS-8130:1984	Conductor for insulated electric cables & flexible cords.	
2.0	STANDARDS			Aluminum Conductors for overhead transmission	
	STANDARDS	3	IS-398(Part-IV):1994	purposes, Part 4: Aluminium alloy stranded conductors	
			10.5004.4004	(aluminium magnesium silicon type)	
		4	IS-5831:1984	PVC insulation and sheath of electric cables.	
		5	IEC-60228/3-2004	Conductor of insulated cables	
		6	IEC-60502/1-2004	Extruded solid dielectric insulated power cables for rated	
				voltage from 1 kV up to 30 kV Mild steel wires, round wires and tapes for armouring of	
		7	IS-3975:1999	cables	
		8	IS 10418: 1982	Specification for Drums of Electric cables	

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Doc. Title	Technical Specification - 1	Technical Specification - 1.1 kV LT Power Cables of various sizes		
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Nandita Raju	Gagandeep Kaur	Brajanath Dey	H C Sharma	
Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode	

For Tata Power Odisha

1	Maximum ambient temperature	50 deg. C
2	Max. Daily average ambient temp	40 deg. C
	Maximum ambient temperature in closed box	60 deg. C
3	Min Ambient Temperature	0 deg. C
4	Maximum Humidity	100%
5	Minimum Humidity	10%
6	Average Annual Rainfall	1450 mm
7	Average No. of rainy days per annum	60
8	Rainy months	June to Oct.
9	Altitude above MSL not exceeding	1000m
10	Wind Pressure	150 kg/m ² up an elevation of 10 m

The atmosphere is generally laden with mild acid and dust suspended during dry months and is subjected to fog in cold months. The design of equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.3 g.

For Tata Power Delhi:

CLIMATIC CONDITIONS OF THE INSTALLATION

3.0

1	Maximum ambient temperature	50 deg. C
2	Max. Daily average ambient temp	40 deg. C
3	Min Ambient Temperature	0 deg. C
4	Maximum Humidity	100%
5	Minimum Humidity	10%
6	Average Annual Rainfall	1450mm
7	Average No. of rainy days per annum	60
8	Rainy months	June to Oct.
9	Altitude above MSL not exceeding	300m
10	Wind Pressure	150 kg/m ² up an elevation of 10 m

The atmosphere is generally laden with mild acid and dust suspended during dry months and is subjected to fog in cold months. The design of equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.3 g.

For Tata Power Mumbai:

1	Elevation	Around 300 m above sea level
2	Climate	Tropical with ambient temperature of 40 deg. C. Average over a 24 hour period and 45 deg. C maximum. Extremely wet conditions for four months in the year conducive to fungus growth and mild dew. Average rainfall 2000 M
3	Type of laying	Laying in ground and cable trenches. At road, railway crossings, to be laid through RCC/HDPE pipes.
4	Minimum depth of laying	1 metre
5	Maximum soil temperature of cable depth	30 deg. C
6	Characteristics of soil at cable laying	Generally clay
7	Estimated soil Thermal resistivity	120 deg. C-cm/W
8	Type of road surface	Asphalted or paved or concreted

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Nandita Raju	Gagandeep Kaur	Brajanath Dey	H C Sharma
Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode

		S. N	о.	Description	ı	Units		Re	quireme	nt			
			1	Voltage grad	de	kV	1.1						
			2	System Volta	age	V	415						
			3	Variation in s voltage		%	<u>+</u> 6%						
			4	Variation in strequency	supply	Hz	50 <u>+</u> 5%						
			5	Number of p	hases		4 wire (2 wire (3 phas 1 phas	e and 100 e and 100	0% neut 0% neut	ral), ral)		
			6	System grou	ınding		Suitable	e for ea	irthed sys	stems ar	nd unear	thed sy	stems
			7	Fault level			The cables shall be suitable for withstanding without damage; thermal and mechanical stresses due to short circuit currents for 1 second						
		8 Type of C			le		insulate Steel F sheathe For Tar XLPE i Galvan						vanized H outer nductor,
			9	Co	re		Four/Two/One						
	GENERAL			Conductor			IS 8130	Electrolytic Grade Aluminium /Copper conforming to IS 8130, and are Compact circular or Compact shaped, Solid/Stranded circular.					
4.0	TECHNICAL REQUIREMENTS	11		Insulation			High gr	ade XL	PE insula Part-I) - 1	ation by		n proce	ss as
		12		Inner sheath				ed PVC	Compou		ST2 as	per	
		13		Armour					eel round	wire as	per IS:3	975-199	99
		14		Outer sheath	n		For Tata power Mumbai- Extruded FRLSH PVC Compound Type ST2 as per IS:5831-1984 For Tata power Delhi/ Odisha- Extruded PVC Compound Type ST2 as per IS:5831-1984						
		15		Standard cable on a tolera	drum with	m		As mentioned in Clause No.12 of this specification					
		441	.V C:-	ngle Core XL	DE inquist	ad unarma	urad aak	la aan	forming	40 10 70	00.4000	,	
		S		ameter	Unit	eu unanno	Require		ilorining	10 13 70	730.1300	,	
		No. Size	of Ca		sq.mm	2.5	4	25	50	95	185	300	630
		1	1	ductor	•								
		a.	3311	Type		Al	Al	Al	Al	Al	Al	Al	Al
		b.	Grad			H2	H2	H4	H4	H4	H4	H4	H4
		c.	No. o	of Cores	Nos.	1	1	1	1	1	1	1	1
		d.	Max res	imum D.C. sistance of luctor at20 deg C	Ohm/K m	-	7.41	1.20	0.641	0.320	0.164	0.100	0.0469

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Initiator	(Engineering)	

Doc. Title	Technical Specification - 1.	nnical Specification - 1.1 kV LT Power Cables of various sizes						
Doc. No	ENG-TATA POWER-Distribut	Eff. Date: 26/03/19						
Rev. No	00							
Prepared by:	Reviewed By:	Approved By:	Issued By:					
Nandita Raju	Gagandeep Kaur	Brajanath Dey	H C Sharma					
Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode					

	e.	A.C. resistance at operating temperature of 90 deg C	Ohm/K m	-	9.50	1.54	0.822	0.410	0.212	0.130	0.064
	f.	Short circuit capacity for 1 second	kA	0.24	0.38	2.36	4.70	9	17.5	28.3	59.43
	g.	Continuous current ratingat 40 deg C	А	20	31	98	165	230	360	501	814
	h.	Minimum no. of wires in the conductor	Nos.	3	3	6	6	15	30	30	53
	i.	Shape of conductor		Non- compacted	Strande	ed Comp	oact Circu	lar or Cor	npact sh	aped	
	2	Insulation									
	a.	Nominal thickness	mm	0.70	0.70	0.90	1.0 1	.10 1	.60	1.80	2.40
	b.	Minimum thickness(at any point of measurement)	mm	0.55	0.55	0.75	0.95 0	.90 1	.35	1.55	2.10
	3	Inner sheath			Not Ap	plicable)				
	4	Armour			Not Ap	plicable)				
	5	Outer Sheath									
	a.	Nominal thickness	mm	1.80	1.80	1.80	1.80	1.80	2.00	2.00	2.20
	b.	Minimum thickness(at any point of measurement)	mm	1.24	1.24	1.24	1.24	1.24	1.40	1.40	1.56

S No.	Parameter	Unit	F	Requiremen	t		
Size of	Cable	sq.mm.	10	16	25	50	50
1	Conductor						
a.	Туре		Al	Al	Al	Al	Cu
b.	Grade		H2	H4	H4	H4	H4
C.	No. of Cores	Nos.	2	2	2	2	2
d.	Maximum D.C. resistance of conductor at20 deg C	Ohm/Km	3.08	1.91	1.20	0.641	0.387
e.	A.C. resistance at operating temperature of 90 deg C	Ohm/Km	3.95	2.45	1.539	0.822	0.495
f.	Short circuit capacity for 1 second	kA	0.94	1.5	2.35	4.7	7.2

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	lo ::	1		1	1		1
g.	Continuous current rating at 40 deg C	А	67	88	117	176	228
h.	Minimum no. of wires in the conductor	Nos.	7	6	6	6	7
i.	Shape of conductor		Non- compacted circular	Stranded (shaped	Compact C	ircular or Co	mpact
2	Insulation						
a.	Nominal thickness	mm	0.70	0.70	0.90	1.00	1.00
b.	Minimum thickness(at any point of measurement)	mm	0.55	0.55	0.75	0.80	0.80
3	Inner sheath			- 1		1	
a.	Туре		For Tata pow retardant ca	bles with red		VC FRLSH (gen evolution	
			For Tata	power Delh	i/ Odisha-	Extruded PV	С
b.	Minimum thickness(at any point of measurement)	mm	0.30	0.30	0.30	0.30	0.30
4	Armour						
a.	Type		GS round wi	re		•	
b.	Nominal diameter	mm	1.4	1.4	1.6	1.6	1.6
c.	Tolerance	mm	plus/minus 0.040	plus/min us 0.045	0.045	plus/minus 0.045	plus/mi nus 0.045
d.	No. of wires	Nos.	Total number s inner sheath w wire of armour.	ith a gap of	ch that thes less than	se are closely the diameter	r of single
e.	Type of zinc coating		Medium	Medium	Medium	Medium	Medium
f.	Mass of zinc coating	g/sq.m.	95	95	95	95	95
g.	No. of dips		1 dip for 1 min.	1 dip for 1 min.	1 dip for 1 min.	1 dip for 1 min.	1 dip for 1 min
5	Outer Sheath				·		
a.	Minimum thickness(at	mm	1.24	1.40	1.40	1.56	1.56

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					_
	any point of				
	measurement)				

S No.	Parameter	Unit		Requireme	nt		
В	Size of cable	sq.mm	4C*120	4C*150	4C*185	4C*240	4C*300
1.	Conductor						
a.	Туре			Aluminium	1		
b.	Grade			H4			
C.	No. of cores	Nos.	4	4	4	4	4
d.	Maximum dc resistance of conductor at 20°C	ohm/km	0.253	0.206	0.164	0.125	0.100
e.	Short circuit capacity for one second	kA	11.34	14.17	17.48	22.68	28.34
f.	Continuous current rating at 40degC	А	264	305	350	418	488
g.	Minimum number of wires in the conductor	Nos.	15	15	30	30	30
h.	Shape of conductor		Stranded se	ctor shaped		•	
2.	Insulation						
a.	Nominal thickness	mm	1.2	1.4	1.6	1.7	1.8
b.	Minimum thickness (at any point of measurement)	mm	1.15	1.20	1.54	1.65	1.55
4.	Inner sheath						
a.	Туре		retardant c smoke)		educed halo	PVC FRLS ogen evolution	
b.	Minimum thickness (at any point of measurement)	mm	0.5	0.5	0.5	0.6	0.7
3.	Armour						
a.	Type of armour			GS Round W	/ire		
b.	Nominal Diameter	mm	2.0	2.5	2.50	2.50	3.15
C.	Tolerance	mm		±0.065			±0.080
d.	Type of Zinc coating		Medium	Medium	Medium	Medium	Medium
e.	Mass of Zinc coating	g/m²		110			120
f.	Number of dips		1 dip for1 minute and 1 dipfor ½ min	1 dip for 1 minute and 1 dipfor ½ min	1 dip for 1 minute and 1 dipfor ½ min	1 dip for1 minute and 1 dipfor ½ min	1 dip for minute and 1 dip for Min
5.	Outer Sheath						1
a.	Minimum thickness (at any point of	mm	1.88	2.04	2.20	2.36	2.52

Ī	S No.	Parameter	Unit		Requirement			
	В	Size of cable	sq.mm	4C*16	4C*25	4C*35	4C*50	4C*95
	1.	Conductor			Aluminium			

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				1					
		a.	Туре						
		b.	Grade			H4	1		
		C.	No. of cores	Nos.	4	4	4	4	4
		d.	Maximum dc resistance of conductor at 20°C	ohm/km	1.91	1.2	0.868	0.641	0.320
		e.	Short circuit capacity for one second	kA	1.5	2.35	3.31	4.7	8.93
		f.	Continuous current rating at 40degC	А	74	96	118	142	222
		g.	Minimum number of wires in the conductor	Nos.	6	6	6	6	15
		h.	Shape of conductor		Stranded se	ctor shaped			
		2.	Insulation						
		a.	Nominal thickness	mm	0.7	0.9	0.9	1.0	1.1
		b.	Minimum thickness (at any point of measurement)	mm	0.6	0.75	0.75	0.80	0.90
		4.	Inner sheath						
		a.	Туре		retardant o smoke)	ables with re	ai-Extruded P educed halog Odisha-Extrud	en evolutio	
		b.	Minimum thickness (at any point of measurement)	mm	0.3	0.3	0.3	0.3	0.4
		3.	Armour						
		a.	Type of armour			GS round Wi	ire		
		b.	Nominal Diameter	mm	1.6	1.6	1.6	1.6	2.0
		C.	Tolerance	mm	±0.045	±0.045	±0.045	±0.045	±0.050
		d.	Type of Zinc coating		Medium	Medium	Medium	Medium	Medium
		e.	Mass of Zinc coating	g/m²	95	95	95	95	105
		f.	Number of dips		1 dip for 1 minute	1 dip for 1 minute	1 dip for 1 minute	1 dip for 1 minute	1 dip for 1 minute
		5.	Outer Sheath						
		a.	Minimum thickness (at any point of measurement)	mm	1.4	1.4	1.4	1.56	1.72
1.1 kV Power Cable shall be manufactured and tested strictly in accordance with the Indian Stalls 7098 (Part – I):1988 and its latest amendments. All material used in the manufacturing of cables shall be new and shall be selected as the best average for the intended use. CONSTRUCTION Conductor a) Class 2, high electrical conductivity plain Aluminium, Stranded, Gh2/H4. Or, b) Plain Copper, Stranded Note: For cable size ≤ 10 sq.mm, H2 grade conductor is required				vailable					

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	Shape	Before stranding, the conductor shall be circular in cross-section, uniform in quality, solid, smooth and free from scale, sharp edges and other defects. Shape as per no. of cores: a) for 4C cables - sector shaped b) for 2C - compacted circular/shaped c) for 1C - compacted circular as per IS 8130:1984
	rmissible nts	Conductors shall conform to relevant standard for permissible number of joints in any one of the single wires forming every complete length of conductor, for location of joints in same layer of conductors and for method of making such joints. No joint shall be made in any conductor after it is stranded.
		Insulation
	Material	The insulating material shall be Cross Linked Polyethylene (XLPE) cured by dry curing process and applied by extrusion process as per IS-7098 (Part I):1988 and its latest amendments. The insulation properties shall be stable under thermal conditions arising out of continuous operation at conductor temperature of 90 degree Centigrade rising momentarily to 250 degree Centigrade under short circuit conditions. The insulating material shall have excellent electrical properties with regard to resistivity dielectric constant and loss factor and shall have high tensile strength and resistance to abrasion. This shall not deteriorate at elevated temperaturesor when immersed in water. The insulation shall be preferably fire resistant and resistant to chemicals like acids, alkalis, oils and ozone. The quality of insulation shall be good and shall not deteriorate when exposed to climatic conditions and shall be uniform, free from voids, scratches and longitudinal grooves. Surface should be smooth.
1	Thickness	The average thickness of the insulation shall be as per IS 7098 (Part-I):1988 with latest amendments or as specified in GTP, whichever is greater with tolerance as per IS 7098 (Part-I):1988. The smallest value of thickness of insulation shall not fall below the nominal value (ti) as specified in IS 7098 (Part 1):1988 by more than 0.1 mm+/- 0.1 (ti).
Ins	sulation ing	It shall fit tightly to the conductor and shall be applied concentrically about the conductor in thickness consistent with the voltage classification. The insulation shall be so applied that it shall be possible to remove it without damaging the conductor.
		Core identification
	4C Cable	For TATA Power Mumbai: Coloured strips or coloured insulation shall be applied on core for identification of cores in 4C cable. Red, Yellow and Blue strips shall be used to identify different phase conductorsand black strip shall be used to identify neutral conductor.

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	For TATA Power DDL: All cores insulation shall be pure black colored. For cores identifications, a XLPE colored line shall be extruded/ embedded in the insulation surface. It should not disturb minimum black coloured insulation thickness above conductor surface.
	Bright Red line shall represent - R ph Bright Yellow line shall represent - Y ph Bright Blue line shall represent - B ph
	For 150 sq. mm. and above, the colored line shall be (3 mm width X 0.5 mm depth from insulation surface) extruded/embedded on the insulation surface.
	Below 150 sq. mm, the colored line shall be (2 mm width X 0.3 mm depth from insulation surface) extruded/embedded on the insulation surface.
	For neutral, as core is already black, extruded line is not required.
2C Cable	For two core cables, cores shall be identified by insulation colored Red and Black.
1C Cable	For single core cable, natural XLPE colour with blue PVC outer sheath.
	Laying up of Cores
Laying up	In twin, three and multi-core cables, the cores shall be laid up together with a suitable lay, the outermost layer shall have be right-hand lay and successive layer shall be laid with opposite lay. Where necessary, the interstices shall be filled with non-hygroscopic material to make the laid-up cores circular. The layup plan of multi cores shall be as per IS 7098 (Part-I):1988.
4C Cabla	Fillers
4C Cable	Fillers are not required. Fillers or bedding used shall be non-wicking and non-moisture absorbing
For 1C & 2C Cable	
	Inner Sheath
Material	The inner sheath material shall be of polyvinyl chloride (PVC) FRLSH (Flame retardant cables with reduced halogen evolution and smoke) compound conforming to the requirements of type ST 2 compound of IS: 5831:1984 with latest amendments. *Note: 1C cables shall not have any inner sheath.
Laying up	The laid up cores shall be provided with an inner sheath applied by pressurized extrusion process. It shall be ensured that it is as circular as possible. The inner sheath shall be so applied that it fits closely on the laid up cores and it shall be possible to remove it without damage to the underlying insulation of the cores. When one or more layers of proofed plastic tape are applied over the laid up cores as a binder, the thickness of such tapes shall not be construed as part of the extruded inner sheath.
Thickness	The thickness of the inner sheath shall be as per IS-7098 (Part-I):1988.
	Armouring
	The armouring shall be of galvanized round steel wires complying the requirements of IS: 3975:1999 along with latest amendments. The resistance measured for galvanized wires/strips when corrected to 20°C,
Material	shall comply with appropriate values mentioned in IS: 7098 (Part - I):1988. The round steel wires taken from the cable shall meet the following: a) Tensile strength not less than 250 N/mm² and not more than 580 N/mm² b) Elongation at the break of round steel wires shall not be less than 6%

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			c) Round steel wire shall meet the requirement of torsion test. The gauge length between vices and minimum no. of turns without break shall be as per IS 3975:1999. d) The zinc coating shall not show any cracks and shall not flake off on rubbing by the bare finger when the round steel wire is subjected to winding test. e) The uniformity of round steel wire shall comply to requirement of IS 3975:1999. f) The mass of zinc coating of round steel wire shall not me less than 95 %
			that of mentioned in IS 3975:1999. The resistivity of round steel wire shall meet the requirement of IS 3975:1999.
			*Note: 1C cables shall not be provided with armouring.
		Laying up	The armouring shall be applied over the inner sheath in multi core cables. The armour wires shall be applied as closely as practicable (less than the diameter of single wire in between the interstices). The direction of lay of the armour shall be left hand.
		Thickness	The dimensions of armour round wires shall be as per IS-7098(Part-I):1988.
		Joints	The joints in armour wire shall be made by brazing or welding and the surface irregularities shall be removed. A joint in any wire shall be at least 300mm from the nearest joint in any other armour wire in the completed cable.
			Outer Sheath
			For Tata power Mumbai-The outer sheath shall be of polyvinyl chloride (PVC)
			FRLSH (Flame retardant cables with reduced halogen evolution and smoke) compound conforming to the requirements of Type ST-2 of IS – 5831:1984 with latest amendments. Surface should be smooth. For Tata power Delhi/ Odisha-The outer sheath shall be of polyvinyl chloride
		Material	(PVC) compound conforming to the requirements of Type ST-2 of IS – 5831:1984 with latest amendments. The sheath shall be ultraviolet protected for operation in direct sunlight. It shall be
			free from voids/bubbles/ bulges & mechanical scratches and damages. Surface should be smooth.
		Laying up	The outer sheath shall be applied by extrusion process, It shall be tightly applied: a) Over the insulation in case of unarmoured single core cables. b) Over the armouring in case of armoured cables.
		Thickness	The thickness of the outer sheath shall be as per IS: 7098 (Part - I):1988.
		Colour	For Tata Power Delhi/ Odisha , the outer sheath shall be blue in color For Tata Power Mumbai , the outer sheath shall be yellow in color
		Following information	tion shall be either stenciled on both sides of the drum or contained in a label
		attached to it:	
			nce to the Standards
		'	se Order number
		- /	cturer's name
			Cable (INCLUDING FRLSH)
		e) Voltage	Grade erial number
	NAME PLATE	'	r of cores
6.0	AND MARKING	3/	I Cross sectional Area of the conductor/Cable size
		i) Cable c	
		· /	of the cable on the drum
		- · ·	r of lengths on the drum (if more than one)
		'	n of the rotation of the drum
		m) Gross n	
		,	of manufacture
			d month of manufacture

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		Following	details shall be printed on both sides of outer sheath at regular interval of every meter and
		180°apart	
		a)	TATA Power
		b)	Name of manufacturer
		c) d)	Year of manufacture Voltage Grade
		e)	No. of cores
		f)	Size of the cable
		g)	Type of cable (FRLSH type - specifically for Tata power Mumbai)
		h)	Sequential length marking at every meter distance throughout the cable length with letter
			font size 12 mm should be embossed on the cable in bold letters.
			e, acceptance & type tests shall be carried out in accordance with the relevant IS/IEC. All
			cceptance tests shall be witnessed by TATA Power's authorized representative. All the
			nts should also be type tested as per the relevant standards. Following tests shall be
		necessari	ly conducted on the 1.1 kV cables in additions to others specified in IS/IEC standards.
		A.	Type tests:
		1.	Tests on Conductor
		a)	Tensile test
		b)	Wrapping test
		c)	Resistance test
		2.	Test for armouring wires as per IS 3975:1999
		a)	Dimensional check
		b)	Tensile strength
		c)	Elongation at break
		d)	Torsion test(for round wires)
		e)	Winding test(for round wires)
		f)	Uniformity of zinc coating
		g)	Mass of zinc coating
		h)	Resistivity
7.0	TESTS	'''	Troblowing
		3.	Test for thickness for insulation and sheath
		0.	1 oct for thiothrood for modulation and official
		4.	Physical tests for insulation
		a)	Tensile strength and elongation at break
		b)	Ageing in air oven
		c)	
		d)	Hot set test Shrinkage test
			Water absorption/gravimetric
		e)	vvaler absorption/gravimetric
		5.	Physical tests for outer sheath
			•
		a)	Tensile strength and elongation at break
		b)	Ageing in air oven
		c)	Loss of mass in air oven
		d)	Shrinkage test
		e)	Hot deformation
		f)	Heat shock
		g)	Thermal stability
		6.	Insulation resistance (Volume resistivity) test
		7.	High voltage test

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		. Flammability test	
		B. Routine tests:	44
		1. Conductor Resistance	Test
		High Voltage test	
		C. Acceptance tests:	
		 Annealing test 	
		Tensile test (for non-co	mpacted conductor)
		Wrapping test (for non-	compacted conductor)
		4. Conductor Resistance	Test
		Test for thickness of in:	sulation and sheath
		Hot set test for insulation	on and outer sheath
		Tensile strength and el	ongation at break test for insulation and sheath
		High Voltage test	
		Insulation resistance (\	/olume resistivity) test
		Flammability test on out	iter sheath
		 Cold impact test on out 	
		Uniformity of zinc coati	
		Dimensional test on arr	
			r FRLSH cable-Tata power Mumbai) test certificates of the 1.1 kV Power cable for the tests as mentioned
8.0	TYPE TEST CERTIFICATES	IABL/KEMA accredited Labs as ertified Test Laboratories during ne event of any discrepancy in the ncluding additional type tests, application to TATA Power. In case ave to submit on their company ower has rights to accept/reject additional certification should be the cable produced is expected.	provided as:
9.0	PRE-DISPATCH INSPECTION	Power has rights to accept/reject the same. Additional certification should be provided as: The cable produced is expected to meet long duration performance criteria based on quality and consistency of manufacturing. The material shall be subject to inspection by a duly authorized representative of TATA Power. Inspection may be made at any stage of manufacture at the discretion of TATA Power and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to TATA Power's representative(s) at all times when the work is in progress. Inspection by TATA Power or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. TATA Power's authorized representatives shall have the right to inspect the design, materials and workmanship and to report thereon, at any stage of manufacture, if found necessary. All facilities shallbe extended to TATA POWER representatives for witnessing the tests. Due advance notice shall be given to enable to depute TATA Power's representatives for stage inspection. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TATA Power. Following documents shall be sent along with material a) Test reports b) MDCC issued by TATA Power c) Invoice in duplicate d) Packing list e) Drawings & Catalogue f) Guarantee / Warrantee card g) Delivery Challan	

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	INSPECTION	The material received at TATA Power's Store will be inspected for acceptance and shall be liable for
10.0	AFTER RECEIPTAT	rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report
	STORES	shall be sent to Engineering department of TATA Power.
11.0	GUARANTEE	Bidder shall stand guarantee towards design, material, workmanship & quality of process / manufacturing of item under this contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by TATA Power up to a period of at least 12 months from the date of commissioning or 24 months from the date of last supplies made under the contract whichever is later, (the time scale of 12/24 months could be enhanced subject to mutual agreements), bidder shall be liable to undertake to replace/rectify such defects at their own cost, within mutually agreed time frame, and to the entire satisfaction of TATA Power, failingwhich the later will be at liberty to get it replaced/rectified at Bidder's risks and costs and recover all such expenses plus TATA Power's own charges (@ 20% of expenses incurred), from the Bidder or from the 'Security cum Performance Deposit' as the case may be. Bidder shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by TATA Power.
12.0	PACKING	The cable shall be wound on strong weatherproof and non-returnable wooden drums packed in coil lengths as specified below and in line with the requirement of IS 10418:1982 and its latest amendments. The ends of the cable shall be sealed by means of non-hygroscopic sealing material. Cable drums shall be so constructed as to have required mechanical strength so that the drum flanges and other components do not break during transportation or in storage. The flanges and the outside surface of the barrel shall be free from protruding parts or projections or unevenness whichmight be damaging to the cable or hands of operator during rotation of drums. A protective covering of polymeric sheet shall be applied inside the drum before winding the cable on the drum. Bidder shall ensure that all the equipment covered under this specification shall be prepared for rail/road transport in a manner so as to protect the equipment from damage in transit. Drum lengths for 4C cables should be as follows: 1.1kV 4C 300 sq mm XLPE cable – 500 m 1.1kV 4C 185 sq mm XLPE cable – 500 m 1.1kV 4C 120 sq mm XLPE cable – 500 m 1.1kV 4C 35 sq mm XLPE cable – 500 m 1.1kV 4C 35 sq mm XLPE cable – 500 m 1.1kV 4C 35 sq mm XLPE cable – 1000 m 1.1kV 4C 35 sq mm XLPE cable – 1000 m 1.1kV 4C 35 sq mm XLPE cable – 1000 m
	TENDER	For 2C and 1C cables – 1000 m Bidder shall submit the sample of material (0.3 meter of length of cable) as specified by TATA Power.
	SAMPLE	
14.	QUALITY CONTROL	The bidder shall submit with the offer, Quality Assurance Plan indicating: a) Various stages of inspection plan b) Tests and checks for each inspection stage which is scheduled to be carried out on the material of construction/ components during manufacturing and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the period of delivery schedule shall be furnished by the bidder. TATA Power reserves the sole right for getting type test of a randomsample from the lot and in case of any discrepancy or deviation from the type test certificates submitted along with the bid; the complete lot shall be rejected. TATA Power's nominated representative shall have free access to the bidder's works to carry out inspections.
15.	MINIMUM TESTING FACILITIES	Bidder shall have adequate in house testing facilities for carrying out all routine tests & acceptance tests as per relevant International / Indian standards.
16.	MANUFACTURING ACTIVITIES	The successful bidder will have to submit the bar chart for various manufacturing activities clearly elaborating each stage, with quantity. This bar chart should be in line with the Quality Assurance Plan submitted with the offer. This bar chart will have to be submitted within 15 days from the release of the order.

	HOG	
Initiator	(Engineering)	

Doc. Title	Technical Specification - 1.1 kV LT Power Cables of various sizes		
Doc. No	ENG-TATA POWER-Distributions-05		Eff. Date: 26/03/19
Rev. No	00	00	
Prepared by:	Reviewed By:	Approved By:	Issued By:
Nandita Raju	Gagandeep Kaur	Brajanath Dey	H C Sharma
Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode

17.	SPARES, ACCESSORIES	Not applicable							
	AND TOOLS	Following mentioned drawings and documents shall be prepared based on TATA Power specification							
		and statutory r a) Con b) Typ c) Qua d) Gen e) Exp f) Cros g) Bill Note: From a submitted as	requirements and shall be impletely filled—in Technical etest Certificates ality Assurance Plan in eral description of the equirement List is sectional diagram of the formaterial in to c) to be submitted a per specification.	e submitte al Particul uipment ne cable as per Ta	ed with the bid: lars and all compon ta power's rec	ents including bro	ochures se to be		
		S No.	Description		For Approval	For Review /	Final Submission		
18.	DRAWINGS AND	1	Technical Paramete	rs	√	Information	√		
10.	DOCUMENTS	2	Manual/Catalogues/ s of all components	drawing		√			
		3	Installation Instruction			√	√		
		4 5	Cross sectional dia of the cable Instruction for use	gram	√		√ √		
			Transport/shipping				· .		
		6	dimension drawing			V	V		
		7	QA & QC Plan		V	√	√		
		8	Routine, Acceptanc Type test Certificate		V	V	√		
		After the awa	ents and drawings shall b rd of the contract four (a all be forwarded for appro			s of cross-sectional drawing of cable, GTP and test			
	CHARANTEED	S. No.	Description	Units	Re	quirement			
	GUARANTEED TECHNICAL	1	Voltage grade	kV					
	PARTICULARS	2	System Voltage	V	1				
		3	Variation in supply voltage	%					
		4	Variation in supply Hz frequency						
		5	Number of phases						
		6	System grounding						
19.		7	Fault level						
		8	Type of Cable		To be furnished by the bidder				
		9	Core		1				
		10	Conductor		1				
		11	Insulation		7				
		12	Inner sheath]				
		13	Armour						
	14 Outer sheath								

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Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode				

	d length of		l										
l5 olerano			cable	on a drum	with	m							
olerano	'												
		4 4 13	/ C:	(I DE :	-41-		1 1-	l	C ! (- 10 70	00-400		
			V Single Core)	KLPE Insui	ated a	rmoured	cab	ie con	forming t	0 15 70	98:198	В	
		S No.	Parameter	Unit			Requi	rement					
		Size	of Cable	sq.mm.	2.5	5	4	25	50(Cu)	95	185	300	630
		1 Conductor		•		l			, ,				
		a.	Туре										
			Grade										
			No. of Cores										
			MaximumD.C.										
			resistance of										
		d.	conductor at										
			20 deg C										
			A.C.		-								
			resistance at										
		e.	operating										
		[C.	temperature of										
			90 deg C										
			Short circuit										
			capacity for 1										
			second										
			Continuous										
		g.	current ratingat 40 deg C										
			Minimum no.										
			of wires in the			furnished	by the	e bidder					
			conductor										
			Shape of										
			conductor		_								
			nsulation										
		a.	Nominal :hickness										
			Minimum		1								
		b.	thickness(at										
			any point of		Tobe	furnished	hv th	e bidder					
			measurement)		- 556	. arriioricu	~y 1110	, bladel					
		-	nner sheath		-								
			Armour		-								
			Outer Sheath Nominal		-								
		a.	hickness										
			Minimum		1								
		thickness(a											
			any point of measurement)										
			measurement)		1								
1 kV T	wo Core XLPE insulate	ed arm	oured cable co	onformina	to IS 7	098:198	8S N	ο.	Para	meter l	Unit		
			Require			1							
			Require										

Initiator

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Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode				

Size of	Cable	sq.mm.	10	16	25	50	50
1	Conductor						
a.	Туре		Al	Al	Al	Al	Cu
b.	Grade		==	1	[T	<u> </u>	1 00
	No. of Cores	Nos.	-				
C.	Maximum D.C.	1105.	4				
d.	resistance of conductor at20 deg C	Ohm/Km	To be furnis	shed by bidd	er		
e.	A.C. resistance at operating temperature of 90 deg C	Ohm/Km					
f.	Short circuit capacity for 1 second	kA					
g.	Continuous current rating at 40 deg C	А					
h.	Minimum no. of wires in the conductor	Nos.					
i.	Shape of conductor						
2	Insulation						
a.	Nominal thickness	mm					
b.	Minimum thickness(at any point of measurement)	mm					
3	Inner sheath						
a.	Type		1				
b.	Minimum thickness(at any point of measurement)	mm					
4	Armour						
a.	Type			-			
b.	Nominal diameter	mm					
C.	Tolerance	mm	1				
d.	No. of wires	Nos.					
e.	Type of zinc coating						
f.	Mass of zinc coating	g/sq.m.					
g.	No. of dips		4				
5	Outer Sheath						
a.	Minimum thickness(at any point of measurement)	mm					

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Nandita Raju	Gagandeep Kaur	Brajanath Dey	H C Sharma				
Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode				

		1	ed cable conforming to IS 7098:1988	
S No.	Parameter	Unit	Requirement	
В	Size of cable			
1.	Conductor			
a.	Type			
b.	Grade			
C.	No. of cores			
	Maximum dc			
d.	resistance of conductor at 20°C			
e.	Short circuitcapacity for one second			
f.	Continuous current rating at 40degC			
	Minimum number of			
g.	wires in the conductor			
h.	Shape of conductor			
2.	Insulation	1		
	Nominal thickness	†		
a.]		
	Minimum thickness			
b.	(at any point of			
4.	measurement) Inner sheath	-		
		To be furr	nished by bidder	
a.	Туре			
	Minimum thickness			
b.	(at any point of measurement)			
3.	Armour			
		4		
a.	Type of armour			
b.	Nominal Diameter			
c.	Tolerance			
d.	Type of Zinc coating			
e.	Mass of Zinc coating			
f.	Number of dips			
5.	Outer Sheath			
a.	Minimum thickness (at any point of measurement)			
S No.	Parameter	Unit	Requirement	
В	Size of cable		1	
1.	Conductor	1		
a.	Туре	1		
b.	Grade	1		
		4		
C.	No. of cores	4		
11	Maximum dc			
d.	resistance of			
d.	conductor at 20°C Short circuitcapacity			

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Prepared by:	Reviewed By:	Approved By:	Issued By:				
Nandita Raju	Gagandeep Kaur	Brajanath Dey	H C Sharma				
Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode				

	f.	Continuous current rating at 40degC	To be furnished by bidder	
	g.	Minimum number of wires in the conductor		
	h.	Shape of conductor		
	2.	Insulation		
	a.	Nominal thickness		
	b.	Minimum thickness (at any point of measurement)		
	4.	Inner sheath		
	a.	Туре		
	b.	Minimum thickness (at any point of measurement)		
	3.	Armour		
	a.	Type of armour		
	b.	Nominal Diameter		
	C.	Tolerance		
	d.	Type of Zinc coating		
	e.	Mass of Zinc coating		
	f.	Number of dips		
	5.	Outer Sheath		
	a.	Minimum thickness (at any point of measurement)		
		(TO BE ENCLOSED \	WITH TECHNICAL BID)	•
l l	Unless specifications.	cally mentioned in this	shall be set out by the Bidders, clause by Clause in this schedule. Schedule, the tender shall be deemed to confirm the purchaser's	
	S.No. Cla	use No.	Details of deviation with justifications	
SCHEDULE OF DEVIATIONS				

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		HOG	
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Prepared by:	Reviewed By:	Approved By:	Issued By:	
Nandita Raju	Gagandeep Kaur	Brajanath Dey	H C Sharma	
Bhagyalakshmi Nair	Sandeep Kundargi	Nilesh Potphode	Nilesh Potphode	

	We confirm that there are no deviations apart from those detailed above. Seal	
	of the Company	Signature:
	Designation:	

TDCADI	TP SOUTHERN ODISHA DISTRIBUTION LIMITED	
TPSODL WORK INSTRUCTION / OPERATING GUIDELINES		LINES
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1.0 ORGANIZATIONAL VALUES

The Tata Group has always been a value driven organization. These values continue to direct the Group's growth and businesses. The six core Tata Values underpinning the way we do business are:

Integrity - We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.

Understanding - We must be caring, respectful, compassionate and humanitarian towards our colleagues and customers around the world and always work for the benefit of India.

Excellence - We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of goods and services we provide.

Unity - We must work cohesively with our colleagues across the group and with our customers and partners around the world to build strong relationships based on tolerance, understanding and mutual co-operation.

Responsibility - We must continue to be responsible and sensitive to the countries, communities and environments in which we work, always ensuring that what comes from the people goes back to the people many times over.

Agility - We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 ETHICS

In our effort towards Excellence and in Management of Business Ethics at TPSODL, an Ethics Management Team is constituted.

The main objective of the Ethics Management Team is to:

- 1. Record, address and allay the issues and concerns on ethics raised by different stakeholders like employees, consumers, vendors, Associates etc. by initiating immediate corrective actions.
- Ensure proper communication of the ethics policies and guidelines through prominent displays
 at all offices of TPSODL and through printed declarations in all concerned documents where
 external stakeholders are involved.
- 3. Ensure proper framework of policies as preventive measures against any ethics violation recorded by them.

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4. Prepare and submit MIS of all issues and concerns, corrective and preventive actions on monthly basis to the top management for their information.

compliance of co All Associates and Stakeholders are requested to register any grievance on ethics violation on our

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3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

TPSODL awards the contract to the Associate in writing in the form of Purchase Order (PO) or Rate Contract (RC), hereafter referred as Contract, through in any or all of following modes physical handover / post / e-mail / web document / fax with all the attachments/enclosures which shall be part of the contract document.

On receipt of the contract, the associate shall return to TPSODL copy of the contract document duly signed by legally authorized representative of associate, within two days of Effective Date of Contract for contracts having contract execution time less than 30 days and within five days for all other contracts.

3.2 Contract Commencement Date

The date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.3 Contract Completion Date

The date of expiry of Guarantee Period shall be deemed as the Contract Completion Date.

3.4 Contract Period/Time

The period from Contract Commencement Date to Contract Completion Date shall be deemed as the Contract Period/Time.

3.5 Contract Execution Completion Date

The stipulated date for completing the supply as per schedule of quantities shall be deemed as the Contract Execution Completion Date.

3.6 Contract Price /Value

The total all inclusive price/value mentioned in the PO/RC is the Contract Price/Value and is based on the quantity, unit rates and prices quoted and awarded and shall be subject to adjustment based on actual quantities supplied and accepted and certified by the authorized representative of the company unless otherwise specified in schedule of quantities or in contract documents.

3.7 Contract Document

The Contract Document shall mean and include but not limited to the following:

- NIT/Tender Enquiry, QR, Instruction to Bidders, Special Condition of Contract (SCC) of tender, GCC, Technical & Commercial Specifications including relevant annexure and attachments).
- Bids & Proposals Received from Associate including relevant annexure/attachments.
- RC/PO with agreed deviations from the tender/bid documents.
- All the Inspection and Test reports, Detailed Engineering Drawings.
- Material Dispatch Clearance Certificate (MDCC).

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Minutes of Meeting (MoM)

3.8 Contract Language

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language.

The Contract documents and all correspondence between the TPSODL, Third Parties associated with the contract, and the Associate shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi, and local languages.

3.9 Reverse Auction

TPSODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached in Annexure F.

Bid validity will stand get automatically extended from the date of latest Negotiation event i.e. Reverse Auction or Manual Negotiation and accordingly bid shall be valid further

- i. For minimum 45 days if original bid validity duration is lesser than 45 days at latest negotiation date.
- ii. For actual bid validity duration if original bid validity is more than 45 days at latest negotiation date.

4.0 SCOPE OF WORK

All the activities that are to be undertaken by the Associate to realize the contractual deliverables in completeness form Scope of Work. Following clauses list, but not limited to, major requirements of the scope of work.

The associate shall satisfy himself and undertake fully the technical/commercial requirements of items to be supplied as listed in the Schedule of Quantities together with the tests to be performed /test reports to be furnished before dispatch, arrangement of stage and final inspections during manufacturing as per terms and conditions of contract, technical parameters & delivery terms and conditions including transit insurance to be met in order to fully meet TPSODL's requirements.

Completeness: Any supplies and services which might have not been specifically mentioned in the Contract but are necessary for the scope mentioned in Special Terms & Conditions and/or completeness of the works at the highest possible level, including any royalties, license fees & compensation to be paid, whether incurred by the associates or by a third party for the work covered in the scope, regardless of when incurred, shall be supplied/provided by the associate without any extra cost and within the time schedule for efficient, smooth and satisfactory operation and maintenance of the works at the highest possible level under Indian conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this Contract.

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TPSODL have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by submitting a request in writing to the Associate. The Associate shall, within fifteen days of receipt of such request from the TPSODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPSODL requests a change, the Contract price and time shall be adjusted upwards or downwards, as the case may be and shall be mutually agreed to. The associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes as requested till adjustment of contract price and time schedule where so applicable in terms of or otherwise directed by the TPSODL.

5.0 PRICES/RATES/TAXES

Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPSODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPSODL store/site & unloading & delivery at TPSODL stores/TPSODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

The Prices/Rates are inclusive of all taxes, levies, cess and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices/rates shall remain firm till actual completion of entire supply of goods/material/equipment as per contract is achieved and shall remain valid till the completion of the contract.

The prices shall remain unchanged irrespective of TPSODL making changes in quantum in all or any of the schedules of items of contract.

5.1 Changes in Statutory Tax Structure

If rate of any or all of the statutory taxes and duties applicable to the contract changes, such changes shall be incorporated by default if the changes occur within the contract execution time and shall be applicable if the contract is executed by the Associate within the Contract Execution Time.

For execution of contracts beyond contract execution time, where the delay is not attributable to TPSODL no upward revision in tax /duties shall be considered irrespective of changes in the statutory tax structure either within the contract execution time or beyond. However, in such cases, benefits due to any downward revisions in statutory tax rates shall be passed on to TPSODL.

6.0 TERMS OF PAYMENT

On delivery of the materials in good condition and certification of acceptance by TPSODL official, Associate shall submit the Bills/Invoices in original in the name of "The TP Southern Odisha Distribution Limited" to invoice desk, complete with all required documents as under:

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- Test Reports (4 sets).
- MDCC issued by TPSODL.
- Packing List.
- Drawing and Catalogue.
- Guarantee/Warrantee Card.
- Delivery Challan.
- O&M Manual.
- Copy of Order.
- Minutes of Meeting.

Bills/ invoices shall mention Supplier's GST Number. TPSODL will make 100% payment within 30 days of submission of the Bill/Invoice complete in all respects and along with all the requisite documents mentioned above, subject to condition that Associate has furnished the requisite Security-cum-Performance Guarantee as stipulated in the contract.

6.1 Quantity Variation

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by TPSODL and not on the basis of contract quantity.

6.2 Full and Final Payment

Full & Final Payment in all contracts shall be made subject to the associate submitting "No Demand Certificate" in the format as per Annexure-C.

7.0 MODE OF PAYMENT

Payment shall be made through crossed Cheque or RTGS whichever of the two modes chosen by the Associate, in favour of Associate's Bank Account on TPSODL records, on whose name Contract has been issued. Those Associates opting for the RTGS mode shall submit the details of Bank Account and other details as per annexure G. Further, for any payments made, TPSODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate.

8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPSODL for:

- (a) 5% of the PO value if purchase order value is more than Rs 5 Crores.
- (b) 10% of the PO value if purchase order value is less than Rs 5 Crores.

This shall remain valid till the end of the Guarantee Period of contract, plus one month.

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- (c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.
- For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by TPSODL while processing the invoice and shall be released after completion of Guarantee Period plus one month.
- For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable.
- In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPSODL. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. Guarantee Period plus one month.

9.0 STATUTORY COMPLIANCE

9.1 Compliance to Various Acts

Associate should ensure adherence to all applicable laws, rules and regulation applicable under this contract from time to time. In case of violation any risk, costs etc shall be in associates account and keep TPSODL indemnified always till completion of contracts.

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9.2 SA 8000

TPSODL expects its Associates to follow guidelines of SA 8000:2014 on the following aspects

- 1. Child Labour
- 2. Forced or Compulsory Labour
- 3. Health & Safety
- 4. Freedom of Association & Right to Collective Bargaining
- 5. Discrimination
- 6. Disciplinary Practices
- 7. Working Hours
- 8. Remuneration
- 9. Management System

9.3 Affirmative Action

TPSODL appreciate and welcome the engagement/employment of persons from SC/ST community or any other deprived section of society by their business associates.

Relaxation in Contract Clauses under Affirmative Action for SC/ ST Business Associates**

TPSODL believes that inclusive growth is the key to sustainable development, and to promote the same Policy on Affirmative Action for Scheduled Caste & Scheduled Tribe Communities has been adopted across the company.

Under the same pre-text, and to promote entrepreneurship among SC/ST community TPSODL has taken initiative by proposing relaxations in contract clauses as per below:

S. No	Initiative	for SC/ ST BA's	Guideline Document
1	Tender Fees	100% waiver for SC/ST community	All Open Tenders
2	Earnest Money Deposit	50 % relaxation of estimated EMD value	All limited and Open Tenders
3	Performance Bank Guarantee	50% relaxation in PBG for order value above 50 lacs else 25% relaxation	All limited and Open tenders
4	Turnover	25% relaxation in company turnover under qualifying requirement criteria	All Open Tenders

**Classification of BAs under SC/ST shall be governed under following guidelines:

 Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be duly audited balance Sheet for the last FY bearing the name of proprietor.

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- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and audited balance sheet/ ITR for last FY.
- Private limited company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Note: Certification from SC/ST commission shall be required for deciding upon SC/ST status of a person.

9.4 MSME Development ACT 2006

Provisions for Firms falling in The Micro, Small and Medium Enterprise Development Act 2006:-

- i. Business Associate is requested to inform the TPSODL if they fall under provisions of The Micro, Small and Medium Enterprises Development Act, 2006 legislation, and provide necessary documents to TPSODL. The Associate also needs to mention the relevant details on their invoice/ bill.
- ii. Business Associate shall submit the self-undertaking of registration in MSME category at the time of bidding as well as on an annual basis to TPSODL, enabling them to avail the consequent benefits, failing which TPSODL may take appropriate action against such defaults.
- **iii.** Business Associates falling in MSME category are exempted from submitting the Tender Fee when participating in TPSODL tenders. Also they are eligible to submit concessional EMD at 50% of the EMD otherwise applicable.

10.0 QUALITY

10.1 Knowledge of Requirements

The Associate shall be deemed to have carefully examined and to have knowledge of the equipment, the general and other conditions, specifications, schedules, drawings, etc. forming part of the Contract and also to have satisfied himself as to the nature and character of the work to be executed and the type of the equipment and duties required including wherever necessary of the site conditions and relevant matters and details. Any information thus procured or otherwise obtained from TPSODL/Consultants shall not in any way relieve the Associate from his responsibility and executing the works in accordance with the terms of contract.

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10.2 Material/Equipment/Works Quality

The items / works under the scope of the Associate shall be of the best quality and workmanship according to the latest engineering practice and shall be manufactured from materials of best quality considering strength and durability for their best performance and, in any case, in accordance with the specifications set forth in this Contract. All material shall be new. Substitution of specified material or variation from the process of fabrication/ construction/ manufacture may be permitted but only with the prior written approval of the TPSODL.

10.3 Adherence to Rules & Regulations

The Associate shall procure and/or fabricate/erect all materials and equipment in accord ance with all requirements of Central and State enactment, rules and regulations governing such work in India and at site. This shall not be construed as relieving the Associate from complying with any requirement of TPSODL as enumerated in the Contract which may be more rigid than and not contrary to the above mentioned rules, nor providing such construction as may be required by the above mentioned rules and regulations. In case of variance of the Technical Specification from the laws, ordinance, rules and regulations governing the work, the Associate shall immediately notify the same to the TPSODL. It is the sole responsibility of the Associate, however, to determine that such variance exists. Wherever required by rules and regulations, the Associate shall also obtain the statutory authorities' approval for the plant, machinery and equipment to be supplied by the Associate.

10.4 Specifications and Standards

The Associate shall follow all codes and standards referred in the Contract Document. Codes and standards of other may be followed by the Associate with the prior written approval of TPSODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name and qualities of the bought out items without the prior written approval of the TPSODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPSODL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

11.0 INSPECTION/PARTICIPATION

11.1 Right to Carry Out Inspection

TPSODL reserves the right to send its representatives for inspection or participation at various stages of contract execution listed below, applicable as per contract construction.

 During basic design and detail engineering of material/ Equipment carried out by Associate /Outsourced Agencies.

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- During manufacturing stages of the product at Associate's/Associate's Outsourced Agency's Plant/Facility.
- During Pre-dispatch Inspection and Testing of finished/manufactured product at Associate's/Associate's outsourced Agency's Plant/Facility.
- During Installation & Commissioning Activities/Stages.
- Prior to Clearing of the completed installation for commissioning.
- Any other stage as find appropriate by TPSODL during contract execution time.

All inspections and participations shall be carried out by TPSODL giving written intimation to the Associate or receiving appropriate advance written inspection call from the Associate, unless otherwise specified elsewhere in the contract document.

11.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TPSODL's engineers to get acquainted with the technical know-how and the methods and practices adopted by the Associate in basic and detail engineering. The Associate shall provide documents, drawings, calculations etc. as may be required by TPSODL's Engineers.

The Associate shall provide free of charge office accommodation, office facilities, secretarial services, communication facilities, general and drawing office stationary, etc. as may be reasonably required by the TPSODL's engineers. Similarly, facilities shall also be provided by Associate's outsource agencies/ partners/ authorized dealers (collectively termed as sub associates) if such basic and detail engineering activities are carried out in the design offices of sub-Associates.

The Associate shall be responsible for the safety of employees of TPSODL/Third Party Agency when they are at the Associate's /Associate's outsource agency's plant or facility for carrying out/witnessing inspection/testing. All statutory safety precautions as applicable shall be followed by the Associate during Inspection Testing. If TPSODL inspectors are not satisfied with the safety arrangements at the plant, TPSODL have the right to call off inspection till such time corrective action is taken by the Associate.

Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc-as specified in the contract document and submit copies of the test certificates to TPSODL along with the inspection call, for scrutiny of TPSODL.

The Associate and TPSODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to provide compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TPSODL for receiving clearance for dispatch of materials

11.3 Third Party Nomination

TPSODL also may nominate a third party for the purpose of carrying out the inspection and such an agency shall be entitled to all the rights and privileges of TPSODL as far as conducting the inspection.

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11.4 Waiver of Inspections

TPSODL on its own discretion shall chose to waive off any inspection and ask the Associate to submit all the test reports as applicable as per contract specifications, related to inspection and testing of the goods ordered for scrutiny and clearance for dispatch.

11.5 Incorrect Inspection Call

In case it is observed that the material offered for inspection is not ready at the time of TPSODL inspection visit rendering it as futile, all costs towards such inspection shall be recovered from the BA. Taxes as applicable on such recoveries shall be borne by the BA.

12.0 MDCC & DELIVERY OF MATERIALS

12.1 Material Dispatch Clearance Certificate

Associate shall deliver material/goods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate (hereafter termed as MDCC) issued by designated authority of TPSODL. Material delivered at TPSODL stores or at project site without a valid MDCC issued by the designated official of TPSODL shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documented during pre-dispatch inspection and testing at Associate's/ Sub Associate's plant/facility. In case Pre-dispatch inspection is waived at the discretion of TPSODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.

The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, sea, rail and road or any other means.

All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall take special precautions to prevent rusting of steel and iron parts during transit by sea. Gas seals or other materials shall be utilized by the associate for protection against moisture during transit of all Plant and Equipment.

Each Equipment or parts of Equipment shall be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the associate, item description, quantity, item/package identification.

All packing cases, containers, packing and other similar materials shall be new and supplied free by the associate and it shall not be required to be returned to the associate.

Notwithstanding anything stated in this clause, the associate shall be entirely responsible for loss, damage or depreciation or deterioration to the materials and supplies due to faulty and/or insecure packing or otherwise during transportation to the Site until otherwise provided herein.

In case of the consignments dispatched by road, the associate shall ensure that it or its subcontractors:

i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.

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ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

Timelines for inspection and MDCC is as below:

S. No.	Inspection	MDCC issuance time including Inspection time (max.)
1	Outside Berhampur	12 days
2	Within Berhampur	5 days
3	Waiver*	3 working days

^{*} Associate is expected to raise the inspection call assuming that Inspection shall be carried out by TPSODL. The decision for waiver of inspection shall be on sole discretion of TPSODL.

12.2 Right to Rejection on Receipt

Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPSODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPSODL.

If delivery of the material is beyond the agreed time, Liquidated damage clause, mentioned in this GCC separately shall be applicable; but the period for levy of LD shall be considered as per the original delivery schedule and not from the agreed timelines for material rectification.

12.3 Consignee

Unless otherwise specified in the Contract Document/ Purchase Order/ Release Order, Materials/ Goods/ Equipment shall be consigned to "Stores-In-Charge", TPSODL, Berhampur

12.4 Submission of mandatory documents on Delivery

Following documents shall be mandatorily submitted by BA along with supply of material to TPSODL stores/site:

S. No.	Documents	Requisite
1	Invoice copy in original	With all consignments
2	LR copy	Wherever required
3	Packing list	With all consignments
4	MDCC	With all consignments
5	Purchase order / Release order	Signed copy
6	Test certificates	With all consignments
7	Inspection/JVR report	In case pre-dispatch inspection is conducted

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Ī	Ω	Device data in CD as per	Wherever applicable
	O	template for metering items	wherever applicable

12.5 Dispatch and Delivery Instructions

S. No.	Instructions
1	Purchase order/ Release order no. shall be mentioned on invoice and on material
2	TPSODL material code and material description shall be mentioned in invoice and on material.
3	"Property of TPSODL" shall be embossed on material.
4	The material shall be properly sealed and packed in standard packing as per purchase order terms & conditions.
5	The weight and quantity of material shall be mentioned wherever applicable
6	The material supplied shall be co-related with the packing list.
7	The name plate detail on equipment shall include Material code, Material description, specification detail of material [as applicable], Serial No. Year of manufacturing, PO/ RO no. and date, "PROPERTY OF TPSODL, Berhampur", Guarantee period and Associate's name.
8	In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at TPSODL central store. For heavy item(s), crane will be provided by TPSODL [unloading cost will be recovered from the associate].
9	The driver should have valid License and one helper in truck. All the documents of truck like registration papers, PUC etc. should be available in Truck.
10	BA representative should accompany the material and get it unloaded / stacked in his presence wherever possible.

13.0 GUARANTEE

13.1 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract, for a specific period termed as Guarantee Period(as elaborated elsewhere in this clause). The Associate should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

13.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TPSODL for the equipment/material/service/work and where standard

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specifications are not part of contract documents or guarantee period is not specified in the standard specifications,, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC Guarantee Period will be 12 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

13.3 Failure in Guarantee Period (GP)

If the equipment and material supplied under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied rendered under the contract, failed in Guarantee Period, TPSODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPSODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.

If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/ damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by TPSODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPSODL within 7 days of reporting the issue by TPSODL. Thereafter, the total time for supply of new equipment/ material shall be equal to the original delivery period of that equipment/ material as specified in the Contract. In case the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.

13.4 Cost of repairs on failure in GP

The cost of repairs/rectification/replacement, required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable, to be borne by Associate. The Associate has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

13.5 Guarantee period for Goods Outsourced

If the Associate outsources partly equipment/materials/services from third party as mutually agreed upon at the pre award stage of contract, TPSODL shall have the benefit of any additional guarantee period if provided by the third party for the part supplied/executed by them.

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13.6 Latent Defect

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

13.7 Support beyond the Guarantee Period

The Associate shall ensure availability of spares and necessary support for a period of atleast 10 years post completion of guarantee period of equipment supplied against the contract.

14.0 LIQUIDATED DAMAGES

- a) For supplies which are of standalone use, multiple in quantities and having a single final delivery schedule, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPSODL, as described below:
 - For delay of each week and part thereof from the delivery schedule specified in the contract, 1% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, TPSODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value.
- b) For Supplies having phased delivery schedule as per contract terms, standalone use and multiple in quantities, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPSODL, as described below:

For the purpose of calculating and applying LD, each delivery lot shall be considered separately. For delay of each week and part thereof, from the delivery schedule specified for the lot, 1% of the contract value corresponding to the undelivered quantity of the lot subject to a maximum of 10% of the total contract value of the subject lot. However, if full contractual quantity is not delivered within 130% of contract time for delivery, TPSODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value. Deduction of LD shall be on landed cost i.e contract value inclusive of taxes and in pursuant statutory compliance GST would be applicable at the stipulated rate and the same shall be borne by Business Associate. In case of LD deduction, a GST invoice shall be issued by TPSODL as a proof of deduction/recovery.

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14.1 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD. Request submitted beyond the timeline shall not be entertained.

15.0 UNLAWFUL ACTIVITIES

The Associate shall have to ensure that none of its employees are engaged in any unlawful activities (whether covered under the scope of the present GCC or not) subversive of the TPSODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPSODL, in accordance with the terms of the present GCC.

16.0 CONFIDENTIALITY

Associate and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

16.1 Documents

All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Associate by the TPSODL in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TPSODL and shall not be used or disclosed to third parties by the Associate for any purpose other than for which they have been supplied or prepared. The Associate may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the TPSODL.

16.2 Geographical Data

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPSODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TPSODL and upon execution of confidentiality agreements satisfactory to the TPSODL with such third parties prior to disclosure.

16.3 Associate's Processes

Title to secret processes if any developed by the Associate on an exclusive basis and employed in the design of the equipment shall remain with the Associate. TPSODL shall hold in confidence such processes and shall not disclose such processes to the third parties without prior approval of the Associate and execution by such third parties of secrecy agreements satisfactory to the Associate prior to disclosure. Upon completion of contract, such processes shall become the property of the TPSODL. Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPSODL under the Contract shall be passed on to the TPSODL. The TPSODL

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shall have the right to use these for construction, erection, start-up, Trial Run, operation, maintenance, modifications and/or expansion of the works including for the manufacture of spare parts.

16.4 Exclusions

The provision of Clauses 16.1 to 16.3 shall not apply to information:

- Which at the time of disclosure are in the public domain which later on become part of public domain through no fault of the party concerned, or
- Which were in the possession of the party concerned prior to disclosure to him by the party, or
- Which were received by the party concerned after the time of disclosure without restriction on disclosure or use, from a third party who did not acquire such information directly or indirectly from the other party or has no obligation of confidentiality for such information.

16.5 Violation

In case of violation of this clause, the Associate is liable to pay compensation and damages as may be determined by the competent authority of TPSODL.

17.0 INTELLECTUAL PROPERTY RIGHTS

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Associate acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark, copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with the TPSODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPSODL.

Moreover, the Associate undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Associate shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages arising from any legal proceeding/s, or otherwise. No liability of TPSODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPSODL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

18.0 INDEMNITY

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPSODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPSODL is held liable for

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by any court judgement. In this connection, the TPSODL shall pass on all claims made against him to the Associate for settlement.

The Associate assumes responsibility for and shall indemnify and save harmless the TPSODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPSODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under the Contract or for which the Associate has assumed responsibilities under the Contract including those imposed under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract. The Associate shall execute, deliver and shall cause his Sub-Associate and suppliers to execute and deliver, such other further instruments and to comply with all the requirements of such laws and regulation as may be necessary there under to conform and effectuate the Contract and to protect the TPSODL.

The TPSODL shall not be held responsible for any accident or damages incurred or claims arising, due to the Associate's error there from prior to completion of work. The Associate shall be liable for such accidents and after completion of work for such accidents as the case may be due to negligence on his part to carry out Work in accordance with Indian laws and regulations and the specifications set forth herein.

19.0 LIABILITY & LIMITATIONS

19.1 Liability

Except for any specific liability which may be identified in the Contract and which may be payable hereunder, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or in connection with the Performance of the Work or supply of Goods *unless caused by Associate's negligence, willful misconduct or breach of contract.*

If the Associate is a joint venture or consortium, all concerned parties shall be jointly and severally bound to the TPSODL for the fulfillment of the provisions of the Contract. The consortium or the joint venture shall designate one party as their leader, who will be the coordinator between the parties and TPSODL. The constituents & leader of the consortium or joint venture shall not be changed without the prior consent of TPSODL.

TPSODL shall have no liability or any special, incidental, indirect or consequential Damages for any loss of Business Contracts, revenues or other financial loss arising out of this Contract.

19.2 Limitation of Liability

The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.

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20.0 FORCE MAJEURE

Force Majeure applies if the performance by either Party ("the Affected Party") of its obligations under Contract is materially and adversely affected.

"Force Majeure" shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

- Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, embargo, blockade, revolution, riot, bombs, religious strife or civil commotion, etc.
- Politically motivated sabotage, or terrorism, etc.
- Action or Act of Government or Governmental agency for which remedy is beyond the control of the affected parties.
- Any act of God.

Note: Causes like power breakdown/ shortages/fire/strikes, accidents etc do not fall under Force Majeure.

Time being the essence of the Contract, if either party is prevented from the performance of its obligations in whole or in part due to an event of Force Majeure, then provided Notice of happening of any event by the Affected Party is given to the other party within seven (7) days from the date of occurrence of such event, which DIRECTLY has impact on works and submitted details and quantum of resulting effect, but at the same time had made all possible efforts to mitigate and overcome effects thereof, the Affected Party's performance under this Contract shall be suspended until such event ceases and the Scheduled Completion shall be delayed accordingly.

If Force Majeure event(s) continue for a period of more than three months, the parties shall hold consultation to discuss the further course of action.

Neither party shall be considered to be in default or in breach of its obligation under the Contract to the extent that performance of such obligation by either party is prevented by any circumstances of Force Majeure which arise after effective date of Contract.

Neither party can claim any compensation from the other party on account of Force Majeure.

21.0 SUSPENSION OF CONTRACT

21.1 Suspension for Convenience

TPSODL may, at any time and at its sole option, suspend execution of all or any portions of the schedule of items of contract to be supplied/work to executed by Associate under the contract by providing to the Associate at least two business days written notice for contracts having contract

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completion period less than sixty days and at least seven business days' notice for all other contracts.

Upon receipt of any such notice, the Associate shall respond as follows as applicable as per contract construction.

- Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts
- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPSODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.
- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

On receipt of resumption notice from TPSODL, the Associate shall resume execution of contract as specified in the resumption notice, within the time frame specified in the resumption notice.

21.2 Suspension for Breach of Contract conditions.

TPSODL shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 22.1 for breach/default of contract conditions.

21.3 Compensation in lieu of Suspension

If the suspension of the contract in whole or in part is for convenience of TPSODL and not due to any breach of contract conditions by the associate, TPSODL at its discretion shall consider compensating all reasonable additional costs incurred by Associate in lieu of suspension of whole or part of contract, on representation of the Associate providing justified estimates of such additional costs and such estimates are found acceptable and approved by competent authority of TPSODL.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 22.1) by the Associate, Associate shall not be entitled for any compensation for any cost incurred in lieu of suspension of whole or part of contract and also shall be liable for compensating all the losses arising to TPSODL in lieu of suspension of contract. Resumption notice shall be subject to the Associate taking corrective action for the breach of contract conditions within the time frame and as per the terms specified in the suspension notice.

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22 TERMINATION OF CONTRACT

22.1 Termination for Default/Breach of Contract

The contract / PO /RC shall be subject to termination by TPSODL in case of breach of the contract by the Associate which shall include but not be limited to the following:

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution
 / completion of the contracted work /PO or failure in ensuring adherence to any delivery
 schedules, in deviation of the contract/PO.
- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPSODL and within the timeframe as specified in the contract document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.
- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.
- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPSODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPSODL.

If the default or breach as specified under clause 22 (except sub clause g thereof) be committed by the associate for the first time, TPSODL shall issue, along the with notice of default or breach, a warning notice instructing the associate to take remedial/corrective action within the time frame stipulated in the warning notice and not to repeat the same in future. The timeframe for corrective action by the associate shall be specific to the nature of breach of contract and the same shall not be objected to by the Associate. If the Associate fails to comply with the instructions in the warning notice or in taking corrective action to the satisfaction of TPSODL then TPSODL may terminate the entire or part of contract at its discretion by issuing termination notice without incurring any liability on this ground.

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In case the contract is terminated for any breach of the nature specified in clause 22 g stated above, TPSODL shall have the right to terminate all the contracts TPSODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPSODL available to it under law.

Without prejudice to its right to terminate for breach of contract, TPSODL may, without assigning any reason, terminate the Contract in whole or in part at any time at its discretion while the contract is in force by serving a written notice of two weeks to the Associate.

In the event of TPSODL having proceeded with termination of the contract the associate shall comply and proceed further in the following manner:

- a) Associate shall discontinue the supply, on the expiry of the said period of two weeks.
- b) Associate shall ensure that no further steps are being taken towards discharge of the obligations, terms and conditions as contained in the contract/PO. This shall include initiation of actions not limited to discontinuation of other allied and associated arrangements which the associate might have entered into with third parties for due discharge of its obligations under the contract with TPSODL.
- c) The Associate shall perform thereafter such tasks as may be necessary to preserve and protect the terminated portion of the material/service/work in progress and the materials and equipment at TPSODL sites or in transit thereto. However the associate shall continue to fulfill its contractual obligations with regard to the part of contract not terminated.
- d) It shall be open for TPSODL to conduct a joint assessment with the associate of the material, supplies, equipment, works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.
- e) It shall be open to TPSODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested against by the associate.

In case of termination of the contract the parties agree to be governed inter alia by the following:

- a) In case TPSODL exercises its right of termination as stated above the associate shall not dispute or object to the same.
- b) The Associate shall be entitled to receive and claim only such payments OR sums of money from TPSODL as may be found payable to it in regard to works executed by it under the terms of the contract and no other claim of any nature whatsoever shall be made by the Associate.
- c) All such provisions which the parties have agreed to survive and prevail even after termination of the contract shall remain effective despite the termination.

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In the event of such termination, TPSODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPSODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPSODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPSODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPSODL under law against the associate.

Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct, TPSODL shall be entitled to bar the associates its agents, affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPSODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPSODL.

22.2 Termination for Convenience of Associate

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPSODL has full right to accept, reject or partially accept such request. However, associate shall continue its supply as per contract till final approval is given to associates for such termination.

22.3 Termination for Convenience of TPSODL

TPSODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPSODL shall pay the Associate for all the supplies/ services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

23.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavour to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Bhubaneswar. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the arbitration proceedings unless otherwise directed in writing by TPSODL or suspended by the arbitrator. Further, TPSODL shall continue making such payments as may be found due and payable to the associate for such works.

23.1 Governing Laws and Jurisdiction

The parties shall be subject to the jurisdiction of the courts of law in Berhampur and any matter arising here from shall be subject to applicable law in force in India.

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24.0 ATTRIBUTES OF GCC

24.1 Cancellation

The Company reserves the right to cancel, add, delete at its sole discretion, all or any terms of this GCC or any contract, order or terms agreed between the parties in pursuance without assigning any reasons and without any compensation to the Associates.

24.2 Severability

If any portion of this GCC is held to be void, invalid, or otherwise unenforceable, in whole or part, the remaining portions of this GCC shall remain in effect.

24.3 Order of Priority

In case of any discrepancies between the stipulations in General Conditions of the Contract (GCC) and Special Conditions of Contract (SCC), the GCC shall stand superseded by the SCC to the extent stipulated hereinabove while balance portion of respective clauses of GCC shall continue to be applicable.

25.0 ERRORS AND OMISSIONS

The Associate shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the TPSODL or not. However any error in design/drawing arising out of any incorrect data/written information from TPSODL will not be considered as error and omissions on part of the Associate.

26.0 TRANSFER OF TITLES

The title of ownership and property to all equipment, materials, drawings & documents shall pass to the TPSODL on acceptance of material by store/site after Inspection.

However, such passing of title of ownership and property to the TPSODL shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract including loss or damages and all risks, which shall vest with the Associate.

27.0 INSURANCE

The Contractor (BA) shall take out the Insurance Policies which shall cover all risks including the following, as applicable:-

- a) The value of the policy shall cover the total value of all the items till they are handed over to TPSODL.
- b) TPSODL shall be the principal holder of the policy. The Associate shall be the loss payee under the policy. Associate / Sub-contractor of the Associate shall not be holders or beneficiaries in the policy nor shall they be named in the policy. TPSODL reserves the exclusive right to assign the policy.

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- c) While the payment of premium may be phased in agreement with the insurance company, at no time shall goods and services required to be provided by the associate shall remain uninsured in accordance with (a) above.
- d) A copy of the Insurance policy shall be made available to TPSODL prior to first dispatch lot of any Equipment and policy shall be kept alive and valid at all times up to the stage of final acceptance.
- e) TPSODL reserves the right to take out whatever policy that is deemed necessary by him if the associate fails to keep the said policy alive and valid at all times and/or causes lapses in payment of premium thereby jeopardizing the said policy. The cost of such policy(s) shall be recovered / deducted from the amount payable to the associate.
- f) The policy shall ensure that the TPSODL's decision regarding replacement of goods damaged, lost or rendered unusable shall be final.

In all cases, the associate shall lodge the claims with the underwriters and also settle the claims and shall also notify TPSODL of any filed claims. However, the associate shall proceed with the repairs and/or replacement of the equipment/components without waiting for the settlement of the claims. In case of seizure of materials by concerned authorities, the associate shall arrange prompt release against bond, security or cash as required. TPSODL, upon request by the associate, will extend all reasonable assistance to the associate in such a case.

All the insurance claims shall be processed and settled by the associate and the missing/damaged items shall be replaced/repaired by them without any extra cost to TPSODL and without affecting the completion time.

28.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TPSODL; be it our Company, our services or our people. Each and every concern, issue, query and suggestion from you will help us to become a better company to work with and shall help us develop a strong bonding of trust and a long term relationship with you.

You may send your feedback by filling up our Business Associate Feedback Form enclosed herewith as *Annexure-E*. You can also log on to our website www.tpsouthernodisha.com to provide your feedback.

- · Suggestions for us
- Feedback form
- Knowledge Sharing/ Experience with TPSODL
- Any issues with TPSODL.

Submission of feedback form is mandatory before the release of final payment to the BA.

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29.0 CONTACT POINTS

In case Business Associate needs information with respect to payments or has any grievances, same may be lodged by log on to our website www.tpsouthernodisha.com

30.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
1.	Performa for Bid Security Bank Guarantee	A
2.	Performa for Performance Bank Guarantee (CP cum EP)	В
3.	Performa for No Demand Certificate by Associate	С
4.	Performa For Application For Issuance of Consolidated TDS Certificate	D
5.	Business Associate Feedback Form	E
6.	Acceptance Form For Participation In Reverse Auction Event	F
7.	Form for RTGS Payment	G
8.	Vendor Appraisal Form	Н
9.	Manufacturer Authorization Form	I
C.	AFERAL COMPINE	

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ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

The TP Southern Odisha Distribution Limited Berhampur

WH	HEREAS	s, (Name	e of the	Bidder)							
						bmitted his l				the (Nam	ie of
KN	OW Bank)					presents	we of	(Name (Name	of of	the the	
wh	office uthern (at Odisha [nent we	Distribut	tion Lim	ited (TF	_(hereinafte PSODL) in the to the TPS	r called "th ne sum of		e bound	fc	or
SE	ALED w	ith the (Commoi	n Seal c	of the sa	aid Bank this		day of	2	20	
The	e COND	ITIONS	of this	obligati	on are:						
i)	If the B or	idder w	ithdraws	s his Bio	d during	the period	of bid valid	lity spe cifie	d in the F	Proforma o	of Bid
ii)	ii) If the Bidder having been notified of the acceptance of his Bid by the TPSODL during the period of bid validity fails or refuses to furnish the Contract Performance Bank Guarantee, in accordance with the Instructions to Bidders.										
We undertake to pay the TPSODL upto the above amount upon receipt of its first written demand, provided that in its demand the TPSODL will note that amount claimed by it is due to it owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.											
This Guarantee will remain in force upto and including the date (No of days as mentioned in tender enquiry) days after the closing date of submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.											
DA	TE				SIG	NATURE O	F THE BA	NK			
	TNESS		۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰		SEA						
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ANNEXURE-B

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

(On Rs.100/- Stamp Paper) Note:

a) b) c)	Format shall be followed in toto Claim period of one month must be kept up The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee			
	The TP Central Odisha Distribution Limited			
ŀ	Berhampur			
	CP cum EP BG No			
	Order/Contract Nodated			
1	. You have entered into a Contract No with M/s			
	(hereinafter referred to as "the Vendor"/ 'BA')) for the supply cum erection / civil work of (hereinafter referred to as" the said Equipment")			
2	for the price and on the terms and conditions contained in the said contract.			
2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish y irrevocable, unconditional and acceptable bank guarantee for 10% of the value of co				
	to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment			
	performance". For this purpose you have agreed to accept the guarantee.			
2				
3	In consideration thereof, we,hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the			
	end of five working days from the date of the claim and without demur and without reference to			
	"the Vendor" such amount or amounts not exceeding the sum of			
	Rs only) being%			
	(percent) of the total value of the contract on receipt of your intimating that "the			
	Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.			

- 4. You shall have the right to file / make your claim on us under the guarantee for a **further period of one month** from the date of expiry.
- 5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with

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reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

- 6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
- 7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
- 8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Berhampur branch and claim will also be payable at Berhampur Branch (to be confirmed by Berhampur Branch by a letter to that effect in case BG is from the branch outside Berhampur).

Berhampur	Branch by a letter to that effect in case BG is from th	ne branch outside Berhampur).
9. Notwithstan	ding anything herein contained, our liability under	er this guarantee is limited to
Rs	(Rupees	only
and the gu	arantee will remain in force upto and including	(Date) and shall be
extended fr	om time to time for such period or period as may be	desired by "the Vendor".
10. Unless a	demand or claim under this guarantee is receiv	ed by us in writing within one
months fror	n(expiry date) i.e. on or before	(claim period end
date), we sh	all be discharged from all liabilities under this guara	ntee thereafter.
Dated at	thisday o	f20

Bank's rubber stamp

Banks full address

Designation of Signatory

Bank official number

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ANNEXURE-C

PROFORMA FOR "NO DEMAND CERTIFICATE" BY ASSOCIATE

(On Company's Letter head or with Company Seal)
(To be submitted by the Associate to TPSODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project Order/	
Contract No.	167
Dated	
Name of the Associate Scheme	CO.
No. / Job No.	7,0
We, M/s	(Associate) do hereby
_	aforesaid Order Noany, issued by TPSODL to our entire
satisfaction and we further confirm that we have no under the said contract / W.O.	claim whatsoever pending with TPSODL
Notwithstanding any protest recorded by us measurement books and / or final bills etc., we very protest in future under this contract.	
We are issuing this "NO DEMAND CERTIFICATE" and with our free consent without any undue influe	
Place	Name
	(Company Seal)

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ANNEXURE-D

PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS CERTIFICATE

To be printed on the letterhead

To be printed on the letterneda
To,
The TP Southern Odisha Distribution Limited,
Berhampur
Sub: Application for issuance of Consolidated TDS Certificate for the FY
Dear Sir,
I / we hereby request/ authorize you to issue me / us a consolidate TDS Certificate for the financial year against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961. For and on behalf of
Signature
Name
Address
Contact No. (Land Line)
(Mobile)
PAN #
Assessing authority

ATTACH THE COPY OF PAN CARD

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ANNEXURE-E

BUSINESS ASSOCIATE FEEDBACK FORM

With an objective to improve our internal processes and systems, and serve you better, we solicit your valuable feedback & suggestions. It is estimated that it will take about 10 minutes to complete this survey. We assure you that your feedback shall be kept confidential. Please send the duly filled feedback form in the "TPSODL addressed - attached envelop"

You are associated with us as	
☐ OEMs ☐ Service Contractor ☐ Material S	Suppliers Material & Manpower Supplier
	15-7
You are associated with us for	
☐ Less than 1 year ☐ More than 1 year but I	ess than 3 years 🗖 More than 3 years
	. 0
Your office is located at	
☐ Berhampur ☐ Within 200 kms from Berha	mpur
Your nearly turnover with TPSODL	
☐ Less than 25 Lacs ☐ 25 Lacs to 1 Crore	☐ More than 1 Cr.
Additional Information	
Your Name	
Your Designation	
Your Organization	
Contact Nos.	
Email	

We once again thank you for your participation in this survey. Please spare 10 minutes to give your feedback on following pages (Section A to E)

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SECTION - A

(Please $\sqrt{\ }$ mark in the relevant box and give your remarks / suggestions / information for our improvement).

	vement).						
		1	2	3	4	5	
S. No.	Parameters	Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	Remarks/ Suggestion
1	You receive all relevant queries / tenders from us in timely manner.						
2	We provide you enough lead time to respond to our queries / tenders.						
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.					5	
4	All following elements of our contract / purchase order are rational:						
4.1	Scope of Work						
4.2	Delivery / Execution Schedule		G				
4.3	Payment Terms						
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	TPSODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	TPSODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPSODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	TPSODL Engineer-in-Charge timely certifies the jobs executed/ material supplied						
11	TPSODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job						
12	BIRD (Bill Inward Receipt Desk) initiative has improved payment disbursement process* (under development)						

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		1	2	3	4	5	
S. No.	Parameters	Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	Remarks/ Suggestion
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?						
14	TPSODL never defaults on contractual terms						
15	In TPSODL Contracts closure is done within set time limit						
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience						
17	Bank Guarantees are released in time bound manner						
18	Our processes related to payment / account settlement are effective.)	
19	You get payments on time						
20	TPSODL Employees follow Ethical behaviour		C				

SECTION - B

SECTION-B (Please rate the following parameters on a scale of 1 to 5, where 1 - Minimum; 5 - Maximum)

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of TPSODL employees you interact with from following team?						
1.1	Project Engineering						
1.2	District / Zones						
1.3	Projects/HOG (TS &P)						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing						
1.7	Accounts / Finance						
1.8	Administration						
1.9	IT & Automation						
2	How would you rate TPSODL in comparison						

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	to your other clients in terms of fairness of treatment and transparency with its Business Associates?			
3	How would you rate TPSODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates			
4	How would you rate TPSODL in comparison to your other clients in terms of building long term & mutually relations hip with its Business Associates			

SECTION - C

Please $\sqrt{\mbox{mark}}$ in the relevant box and give your remarks / suggestions / information for our improvement.

S.	Dovernatore	Certainly	Probably	Certainly	Probably	Remarks/
No.	Parameters	No	No	Yes	Yes	Suggestion
1	Based on your experience with TPSODL, would you like to continue your relationship with TPSODL?		S	5		
2	If someone asks you about TPSODL, would you talk "positively" about TPSODL?					
3	Would you refer TPSODL name to others in your community, fraternity and society as a professional & dynamic organization?	<i>7</i> 0,				

SECTION - D

If we ask you to rate us on a scale of 1 to 10, how will you rate TPSODL, that truly represents your overall satisfaction with us (please tick appropriate box) -

1	2		3	4	5	6	7	8	9		10
		L								i I	

SECTION - E

Please $\sqrt{\text{mark in the relevant box and give your remarks }/\text{ suggestions }/\text{ information for our improvement.}$

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Please spare your thoughts for TPSODL's improvement in particular areas of weaknesses, particularly relating to some great practices, attitudes that you have seen elsewhere in Indian and International Organizations, which you recommend TPSODL to adopt. Please give your valuable salient recommendations.

Please spare your thoughts for TPSODL's improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, altitudes that you

Recommendation	Please tick ($$) your top 5 expectations out of the following 10 points listed below -						
(Please list down improvement you expect from TPSODL)	Timely payment	\chi_{\chi}					
1	Flexibility in Contracts/PO						
	Clarity in PO,s & Contracts						
2	Timely response to quarries						
	Timely certification of works executed						
3	Clarity in Specs, drawings, other docs etc.						
	Adequate information provided on website for tender notification, parties qualified etc.						
4	Timely receipt of material at site for execution						
	Performance Guarantee/EMD released in time						
5	Inspection & quality assurance support for timely job completion						

We thank you for your time and courtesy!!

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ANNEXURE-F

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process more fair and transparent, TPSODL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

- 1. TPSODL shall provide the user id and password to the authorized representative of the bidder. (Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).
- 2. TPSODL will make every effort to make the bid process transparent. However, the award decision by TPSODL would be final and binding on the supplier.
- 3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPSODL, bid process, bid technology, bid documentation and bid details.
- 4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
- 5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPSODL.
- 6. In case of intranet medium, TPSODL shall provide the infrastructure to bidders. Further, TPSODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
- 7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out rightly rejected by TPSODL.
- 8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
- 9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPSODL site.
- 10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
- 11. No requests for time extension of the auction event shall be considered by TPSODL.
- 12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

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ANNEXURE-G

To,		
DGM (Finance) The TP Southern Odisha Distribution Li Berhampur	mit	ited
Sub: e-Payments through National Gross Settlement System (RT		lectronic Fund Transfer (NEFT) OR Real Time S)
Dear Sir,		
We request and authorize you to affect as per the details given below:-	e-p	payment through NEFT/RTGS to our Bank Account
Vendor Code	:	
Title of Account in the Bank	:	
Account Type	:	
		(Please mention here whether account is Savings/Current/Cash Credit)
Bank Account Number	: [
	~	
Name & Address of Bank		
Bank Contact Person's Names	:	
Bank Tele Numbers with STD Code	:	
Bank Branch MICR Code	:	
		(Please enclose a Xerox a copy of a cheque. This cheque should not be a payable at par cheque)
Bank Branch IFSC Code	. [
Dain Dianon ii Oo Oode	. [
		(You can obtain this from branch where you have your account)
Email Address of accounts person: (to send payment information)	:	

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Name of the Authorized Signatory:

Contact Person's Name:

Official Correspondence Address:

We confirm that we will bear the charges, if any, levied by our bank for the credit of NEFT/RTGS amounts in our account. Any change in above furnished information shall be informed to TPSODL well in time at our own. Further, we kept TPSODL indemnified for any loss incurred due to wrong furnishing of above information.

-		
Than	kına	$V \cap \Pi$
HILL	NIII	you,

Fo	r					

(Authorised Signatory)

(Signature with Rubber Stamp)

Certification from Bank:

We confirm that we are enabled for receiving NEFT/RTGS credits and we further confirm that the account number (specify Bank a/c no.) of (Please mention here name of the account holder), the signature of the authorised signatory and the MICR and IFSC Code of our branch mentioned above are correct.

This also is certified that the above information is correct as per Bank record

(Manager's/Officers Signature under Bank Stamp)

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ANNEXURE-H VENDOR APPRAISAL FORM

то ве	SUBMITT	ED BY VENDOR (To be filled as applicable)	
VE	NDOR:		
1.0	DETA	ILS OF THE FIRM	
	1.1	NAME (IN CAPITAL LETTERS)	:
	1.2	TYPE OF CONCERN (PROPRIETARY) Partnership, Pvt. Ltd., Public Ltd. etc.	:
	1.3	YEAR OF ESTABLISHMENT	
	1.4	LOCATION OF OFFICE POSTAL ADDRESS TELEGRAPHIC ADDRESSES, TELEX NO. FAX NO.	
	1.5	LOCATION OF MANUFACTURING UNITS	:
		i) UNITS 1	:
		ii) OTHER UNITS	:
2.0	PROD	DUCTS MANUFACTURED	:
3.0	VERI	OVER DURING THE LAST 3 YEARS (TO BE FIED WITH THE LATEST PROFIT & LOSS EMENT).	:
4.0	VALU	E OF FIXED ASSETS	:
5.0	NAME	& ADDRESS OF THE BANKERS	:
6.0	BANK	GUARANTEE LIMIT	:
7.0	CRED	OIT LIMIT	:
8.0	TECH	INICAL	
	8.1	NO. OF DESIGN ENGINEERS (INDICATE NO. OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	8.2	NO. OF DRAUGHTS MEN	:
	8.3	COLLABORATION DETAILS (IF ANY)	:
0		8.3.1 DATE OF COLLABORATION	:
		8.3.2 NAME OF COLLABORATOR	:
		8.3.3 RBI APPROVAL DETAILS	:
		8.3.4 EXPERIENCE LIST OF COLLABORATOR	:
		8.3.5 DURATION OF AGREEMENT	:
	8.4	AVAILABILITY OF STANDARDS / DESIGN PROCEDURES / COLLABORATOR'S /	:

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	ı		T
		DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT	
	8.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	8.6	QUALITY OF DRAWINGS	:
9.0	MAN	JFACTURE	
	9.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	:
	9.2	POWER (KVA)	
		MAINS INSTALLED	
		UTILIZED	
		STANDBY POWER SOURCE	:
	9.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENT AS APPLICABLE)	:
		9.3.1 MATERIAL HANDLING	:
		9.3.2 MACHINING	:
		9.3.3 FABRICATION	:
		9.3.4 HEAT TREATMENT	:
		9.3.5 BALANCING FACILITY	:
		9.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:
	9.4	SUPERVISORY STAFF	:
	9.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	:
	9.6	NO. OF SHIFTS	:
	9.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	
	9.8	WORKMANSHIP	:
O	9.9	MATERIAL IN STOCK AND VALUE	:
	9.10	TRANSPORT FACILITIES	:
	9.11	CARE IN HANDLING	:
10.0	INSPI	ECTION / QC / QA / TESTING	
	10.1	NUMBER OF PERSONNEL (INDICATE NO. OF YEARS OF EXPERIENCE)	:
	10.2	INDEPENDENCE FROM PRODUCTION	:

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		AVAHABILITY OF BROOFBLIDAL WRITE	
	10.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:
	10.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:
	10.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:
	10.6	STAGE INSPECTION AND DOCUMENTATION	:
	10.7	SUB-ASSEMBLY & DOCUMENTATION	:
	10.8	FINAL INSPECTION AND DOCUMENTATION	:
	10.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	: (0)
	10.10	TYPE TEST FACILITIES	:03
	10.11	ACCEPTANCE TEST FACILITIES	
	10.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	
	10.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC.(AS APPLICABLE)	:
	10.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:
	10.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNIZED LABORATORIES	:
		i) FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	·
		ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	·
11.0	/ COI	RIENCE (INCLUDING CONSTRUCTION / ERECTION MMISSIONING) TO BE FURNISHED IN THE FORMAT ATED IN APPENDIX)	:
12.0	SALE	S, SERVICE AND SITE ORGANIZATIONAL DETAILS	:
13.0		IFICATE FROM CUSTOMERS (ATTACH COPIES OF JMENTS)	:
14.0	POWI	ER SITUATION	:
15.0	LABO	OUR SITUATION	:
16.0 *		ICABILITY OF SC/ST RELAXATION (Y/N) S, SUPPORTING DOCUMENTS TO BE ATTACHED	
17.0	1. F 2. E 3. II N 4. E 5. I	ANIZATIONAL DETAILS PF NO ESI NO NSURANCE FOR WORK MAN COMPENSATION ACT NO ELECTRICAL CONTRACT LIC NO TCC / PAN NO SALES TAX NO WC TAX REG. NO	:
18.0	DOCU	JMENTS TO BE ENCLOSED:	

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	. FACTORY LICENSE
	. ANNUAL REPORT FOR LAST THREE YEARS
	3. TYPE TEST REPORT FOR THE ITEM
4	. PAST EXPERIENCE REPORTS
	i. ISO CERTIFICATE -QMS, EMS, OHAS, SA
	REGISTRATION OF SALES TAX
7	COPY OF TIN NO.
8	S. COPY OF SERVICE TAX NO.
	. REGISTRATION OF CENTRAL EXCISE
	0. COPY OF INCOME TAX CLEARANCE.
	1. COPY OF PF REGISTRATION
	2. COPY OF ESI REGISTRATION
	3. COPY OF INSURANCE FOR WORK MAN
	COMPENSATION ACT NO
	4. COPY OF ELECTRICAL CONTRACT LIC NO
1	5. COPY OF PAN NO
1	6. COPY OF WC TAX REGISTRATION
1	7. DOCUMENTS IN SUPPORT OF SC/ST RELAXATION
	AT S.NO.16.0
1	8. GSTN CERTIFICATE

* Classification of BA's under SC/ST shall be governed under following guidelines:

- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be Proprietorship Deed.
- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed.
- Private Limited Company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

NOTE: Certification from SC/ST Commission shall be required for deciding upon SC/ST status of a person.

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ANNEXURE-I MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:		
Tender Enquiry No.:		
To,		
Chief (Contracts & Stores	·)	
The TP Southern Odisha Berhampur.	Distribution Limited,	O.P.O
Sir,		
factories at [address of O	of OEM], who are official manufacturers EM] do hereby authorize M/s [name of bidden or Bids indicated above, the purpose of whic ctured by us	e <u>r]</u> to submit a Bid in
to subsequently negotiate	e and sign the Contract.	and
Conditions of Contract or	full guarantee and warranty in accordance as mentioned elsewhere in the Tender Docume above firm in reply to this Invitation for Bio	ument, with respect
services as per the Tende standard warranty on the inclusion / exclusion of pa	in case, the channel partner fails to proper Document referred above, M/s [name of 0] materials supplied against the contract. The arts in the warranty shall remain same as defurtner against this tender enquiry.	D <u>EM]</u> shall provide warranty period and
Yours Sincerely,		
For		
Authorized Signatory		

Document No. TPSMS/GSR/STC/009 REV 02



Safety Terms and Conditions

Date of Issue: 19/01/2019

Safety Terms and Conditions

Document No.
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1. Definitions

- 1.1 **Order Manager**: Order Manager is the Tata Power representative, who has the ownership of the given job under the signed contract.
- 1.2 **Service Provider/Contractor/vendor:** An individual or an organization that provides services to Tata Power under a signed contract.
- 1.3 **Site Safety Management Plan:** It is the safety plan agreed between Contractor /service provider & Tata Power. It will contain the entire job specific safety requirement and will be signed by the service provider.
- 1.4 **High Risk Job:** Any job which has significant health and safety risk associated to it. The list of high risk jobs has been identified at Tata Power level.
- 1.5 **Emergency:** a serious, unexpected, business discontinuity and often dangerous situation resulting loss of revenue/property and requiring immediate action.

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2. Safety Policy



HEALTH AND SAFETY POLICY

Tata Power is committed to provide safe and healthy working environment for the prevention of work related injuries and ill-health. Safety is one of our core values. We strive to be a leader in safety excellence in the global power and energy business. In pursuit of this, we are committed to the following:

- Maintain and continually improve our management systems to eliminate hazards and reduce health & safety risks to all our stakeholders.
- Incorporate appropriate health & safety criteria into business decisions for selection of plant and technology, performance appraisal of individuals and appointments in key positions.
- Comply and endeavour to exceed all applicable health & safety legal and other requirements
- Integrate health & safety procedures and best practices into every operational activity with assigned line-functional responsibilities at all levels.
- Involve our employees and business associates in maintaining a safe and healthy work environment through consultation and participation
- Inculcate safety culture by visible leadership and empowerment.
- Ensure required competency to enable our employees and business associates for working safely.
- Promptly report incidents, investigate, share crucial learnings and prevent recurrences
- Influence our business associates in enhancing their health and safety standards and align with Tata Power's health & safety codes and practices.
- Set safety & health metrics as indicators of excellence, monitor progress and continually improve health and safety performance.

We shall ensure the availability of appropriate resources at all times to fully implement and communicate this policy to all stakeholders by suitable means and periodically review its relevance in continuously changing business environment.

Date: 11th March, 2019

TATA POWER Lighting up Lives! (Praveer Sinha) CEO & Managing Director

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3. Safety Organization & Responsibilities

4.1 Contractor Site Management and Supervision

Each Contractor will be responsible for fulfilling all statutory and safety requirements as per the laws of the land and not limited to Factory Act, Electricity Act, Electricity Rules and Regulations, Shop and Establishment Act etc.

Each Contractor shall provide at least one competent full time safety supervisor for workforce of less than 100 numbers. When workforce ranges from 100 to 1000, the contractor has to provide at least one qualified safety officer and safety supervisors (reporting to the safety officer) in the ratio 1:100. For every 1000 addition in workforce, the contractor has to add 1 safety officer. The Tata Power Project Safety Manager will review and approve the appointment of all safety supervisors. Contractor/Subcontractor safety supervisors/officers will work with Tata Power Safety Managers and align themselves with Tata Power safety requirements.

Each Contractors'/Subcontractors' Site Manager is responsible, and will be held accountable, for the safety of their sub contractors and workforce and for ensuring that all equipment, materials, tools and procedures remain in safety compliance at job site, including:

- 4.1.1 Holding officer/supervisors accountable for safety and actively promote safe work performance.
- 4.1.2 Participate in and cooperate with all safety program requirements to be implemented in order to meet Tata Power safety objectives.
- 4.1.3 Ensure timely reporting of safety incidents, near misses, unsafe acts and conditions.
- 4.1.4 Identify the training needs of its employees and maintain all safety training documents.
- 4.1.5 Provide safety performance report at an agreed frequency.
- 4.1.6 Stopping of unsafe work (acts and/or conditions) immediately, until corrective action be taken.

4.2 Contractor Supervisors and General Staff

Contractors' site supervisors and general staff members in charge of job site functions such as field engineering, warehousing, purchasing, cost and scheduling, etc. are responsible for the safe performance of the work of those they supervise. They must set an example for their fellow employees by being familiar with applicable sections of the Site Safety program and ensuring that all site activities are performed with SAFETY as the primary objective.

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Each site supervisor is responsible and will be held accountable for identifying, analyzing and eliminating or controlling all hazards through implementation of an aggressive, pro-active Health, Safety and Environmental Program from project inception through project completion. Each supervisor will proactively participate in the SHE program by observing, correcting unsafe acts, and recording these observations.

4.3 Contractor Workforce

Contractor workforce must make safety a part of their job by following safety rules and regulations and by using all safeguards and safety equipments. They must take an active part in the Site Safety program to ensure their own safety and injury-free employment as well as being alert to unsafe practices of their fellow employees.

Every member of the workforce is expected to report for work without influence of any Drug/Alcohol. All employees are expected to report any hazardous conditions practices and behaviors in their work areas and correct where ever possible.

Workforce is responsible for active participation in safety and health programs, suggestion systems, trainings and in immediate reporting of all injuries, any unsafe practices, conditions or incidents to their supervisors.

4.4 Vendor/Contractor

Vendors/Contractor shall at all times comply with, and ensure that their workforce comply with all site safety rules and regulations. Specifically, with applicable provisions of the Tata Power Site Safety Management Plan, and all statutory safety rules and regulations.

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4. Site Safety Rules and Procedures:

The work in the safest possible manner can only happen when it has been carefully planned and all applicable procedures are followed. The Tata Power Safety Procedures are derived from Tata Power best practices and the applicable Government acts regulations. In each case, the most stringent regulation is used.

Following is the list of Tata Power's critical Safety Rules and Procedures. Contractor shall refer to approved Rules and Procedures for detailed requirements and ensure conformance.

5.1 Lock Out and Tag Out Procedure

This procedure is intended to be used for the protection of Personnel while servicing or performing maintenance on equipment / pipeline / vessel / process systems. This is a general procedure that shall be used as the minimum requirements for isolation of equipment, pipelines, machines, system from all possible sources of hazardous energy and / or material such as Steam, Hot Water, Compressed Air, any other process fluid / chemical energy /Mechanical energy or Electrical energy. For complete procedure kindly refer Procedure Document No. TPSMS/CSP/LOTO/001 REV 01 available on official website of Tata Power (www.tatapower.com)

5.2 Excavation Safety (Shoring and Sloping) Procedure

This procedure is developed to cover the safe practices required for shoring and sloping in excavation and trenching jobs. This procedure is developed to establish mandatory requirements for practices to protect personnel, property and equipment from hazards associated with above activities. For complete procedure kindly refer Procedure Document No TPSMS/CSP/EXS/002 REV 01 available on official website of Tata Power (www.tatapower.com)

5.3 Confined Space Entry Procedure

This procedure outlines the steps required to perform the confined space entry and to protect personnel from the hazards of entering and conducting operations in confined spaces. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/CSE/003 REV 01 available on official website of Tata Power (www.tatapower.com)

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5.4 Working at Height Procedure

This procedure describes the rules and procedures to protect employees from the hazards of working at heights.

This procedure is developed to cover the safe practices required for Working at Heights. This procedure is developed to establish mandatory requirements for practices to protect personnel from hazards associated in this area. For complete procedure kindly refer Procedure Document No —TPSMS/CSP/WAH/004 REV 01 available on official website of Tata Power (www.tatapower.com)

5.5 Heavy Equipment Movement Safety Procedure

Heavy equipment lifting and movement is an activity involving loading, unloading, storage and movement from one place to another including lifting and erection or repairing of equipment with cranes or hoists. Material, machinery and equipment handling operations are being carried out by large capacity cranes and hoists, which make the job safer and faster. This procedure addresses the hazards and precautions associated with such equipment and their use. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/HEMS/005 REV 01 available on official website of Tata Power (www.tatapower.com)

5.6 Mobile Crane Safety Procedure

Mobile cranes are responsible for many incidents, injuries. Falling loads from mobile cranes pose a severe hazard to operators and nearby workers and property. Many types of cranes, hoists, and rigging devices are used for lifting and moving materials. To maintain safe, appropriate standards has to be adhered to and only qualified and licensed individuals shall operate these devices. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/MCS/006 REV 01.

5.7 Scaffold Safety Procedure

This procedure is developed to provide information on the safe erection, use, dismantling and maintenance of access scaffolding in the workplace. It is developed to establish mandatory requirements for practices to protect personnel from hazards associated with erection, use and dismantling of scaffolds. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/SCAF/007 REV 01 available on official website of Tata Power (www.tatapower.com)

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5.8 Electrical Safety Procedure

The objective of these standards is to specify minimum mandatory requirements and advisory guidance for identifying and controlling hazards to ensure 'Zero Harm' with regard to operation maintenance and testing of electrical equipment. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/ELEC/010 REV 01 available on official website of Tata Power (www.tatapower.com)

5.9 Job Safety Analysis (JSA) Procedure

This objective of this procedure is to have a task based risk assessment process in place that identifies, evaluates and controls the risks associated with work activities, and as a result, prevents those involved in the task or those potentially affected by the task, from being harmed. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/JSA/009 REV 01 available on official website of Tata Power (www.tatapower.com)

5.10 Fire Safety Management Procedure

Objective of This standard is to specify the minimum mandatory requirements and advisory guidelines to ensure prevention of fire related incidents and managing / controlling their impacts if they do occur. For complete procedure kindly refer Procedure Document No-TPSMS/CSP/FSM/011 REV 01

5.11 Permit To Work Procedure

Given the inherent hazards of the power generation and distribution industry, a significant number of TATA POWER operations and installations are critical. Work Permit (WP) System is an essential element in controlling the workplace risks in an effective manner. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/PTW/008 REV 01 available on official website of Tata Power (www.tatapower.com)

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5.12 Lift (Elevator) Safety Procedure

To provide safe operating procedure for taking control of lift car before entering and existing the pit of OTIS make elevators. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/LIFT/001 REV 01 available on official website of Tata Power (www.tatapower.com)

5.13 Working on conveyor belt Procedure

This procedure is developed to cover the safe practices required for Working on live equipment and to protect personnel from hazards associated with it. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/CONV/002 REV 01 available on official website of Tata Power (www.tatapower.com)

5.14 Handling Hazardous Materials Procedure

This Procedure is developed to provide procedure for recycling and / or safe disposal of used / waste batteries in compliance with all legislation. For complete procedure kindly refer Procedure Document No-TPSMS/GSP/HAZM/003 REV 01 available on official website of Tata Power (www.tatapower.com)

5.15 Material Handling and Storage Procedure

The purpose of this document is to provide procedures to assist the safe handling of materials (manual handling and mechanical handling). For complete procedure kindly refer Procedure Document No – TPSMS/GSP/MATL/004 REV 01 available on official website of Tata Power (www.tatapower.com)

5.16 Contractor Safety Management Procedure

The purpose of this document is to engage with contractors in a way to create safe work environment for everyone working for Tata Power. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/CSM/015 REV 01 available on official website of Tata Power (www.tatapower.com)

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The above procedures will be updated periodically and the updated version of the procedures as well as any additional critical procedure will be available on official website of Tata Power (www.tatapower.com) for your reference.

5. Training and Capability Building

Safety Training and capability building of workforce is a major component of safety management program. All training required must be provided and documented as specified by Tata Power and Indian Regulations. Tata Power Safety Manager will audit contractors training and related documentation to assure its adequacy.

6.1 Tata Power Site Safety Orientation

All Tata Power contractor and subcontractor workforce is required to attend Tata Power Site Safety Orientation Training to receive a Safety Training Card, which is required to obtain a Gate Pass to the site, prior to entry.

This Safety Orientation Course will be for duration of minimum half day. The information provided during the orientation will include, but is not limited to following:

- 1. Job rules, personal safety and conduct
- 2. Hazards reporting
- 3. Reporting of injuries
- 4. Emergency procedures
- 5. Safety Activities and Program including disciplinary measure and incentives.
- 6. Critical safety procedure relevant to the job

6.2 Capability Building

Appropriate training such as L1, L2 & L3 is given to ensure that a jobholder, either supervisor or worker, is competent to do his/her job safely. The skill training is provided through TPSDI and other agencies authorized by Tata Power on the list of 15 procedures mentioned under safety procedure.

Contractor shall ensure that concerned workmen are provided with adequate training before he/she is allowed to execute the work.

An evaluation test will be conducted after the completion of the training. Those workmen employee who meet the minimum required competency will be provided with Gold Card which is valid for 3 years, post which the workmen has to reappear for the assessment. If the workman is not able to qualify the assessment, he/she will be given 3 additional attempts to clear in 3 month timeframe failing which he/she will not be allowed to work on high risk jobs.

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6. Pre Employment and Periodic Medical check up

Contractor shall arrange to conduct a pre employment and periodic medical check-up for its entire workforce by Tata Power medical officer or Tata Power authorized medical officer. The contractor shall be able to produce the certificate prior to the employment. The contractor shall also organize to conduct periodical medical checkup (six monthly) for the following category of employees:

- Drivers (Check for Vision & Hearing)
- Equipment Operators (Check for Vision & Hearing)
- Workforce working at Height (Check for Vision, Hearing, Vertigo & Height Phobia)
- Workforce Handling the hazardous substances (Coal, ash and chemicals)
- Workforce in high decibel area (> 90 Decibel, Check for Hearing)
- Workforce, working in specific areas requiring specific medical attention should conduct the medical test as laid down in the respective Site Safety Management Plan.

7. Safety Performance Evaluation and Penalties

8.1 A certain percentage of the bill value will be retained against every running bill as safety performance retention. The amount will be released with the last invoice based on "Safety Performance score" attached in CSM-F-3 of CSM procedure. The amount is based on following table

Contract Value	Retention
Contract value	Amount(%)
Upto 10 Lakhs	2.5
10 – 50 lakhs	2
0.5 to 10 Cr	1.5
>10 Cr	1

- 8.2 Safety performance Score will be monitored by the Order Manager every month.
- 8.3 For the contract value of more than Rs 1 Cr or contract duration more than 12 months, the retention amount shall be released half yearly based on safety performance. For all remaining contracts, the retention amount will be released with the final bill.
- 8.4 In case of job stoppage due to safety violations/ unsafe observations at the site, no time extension shall be given to the contractor, if such delays are attributable to contractor.

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- 8.5 In case of fatality, limb loss or loss of property, vendor has to pay for liability, legal, statutory and additional mutually agreed settlement charges imposed by the appointed committee. This charge is over and above the retention amount.
- 8.6 The committee will finalize an amount between 5 -50 lakhs based on factors such as advise by statutory authorities, contract value and impact of accident etc.
- 8.7 Safety performance bonus 1% (limiting to 50 lakhs) of the invoice value will be considered at the end of the job if the contractual safety performance score is 100%.
- 8.8 During the progress of the work, concerned Supervisor/Engineer will visit and inspect the work site regularly and evaluate the safety performance of the contractor based on matrix attached herewith.
- 8.9 Order Manager, divisional chief and SBU head have the authority to terminate the contract in case of three consecutive serious violations.

Safety Performance Evaluation - CSM-F-3

	Lead Indicators	Unit Of measurement	Target	weight age
1	% of Employee certified in TPSDI/Authorized agency	%	50	10
2	CFSA score (Annexure 6.1)	Average Severity of Violations	1.49	20
3	Monthly inspection completed for Critical Equipments, lifting Tools & Tackles and hand tools used at site	%	80	5
4	Condition of tools, tackles and equipments	%	100	15
	<u>Lag Indicators</u>			
1	Number of Fatalities	No.	0	30
2	Number of Lost work day case (LWDC)	No.	0	10
3	Man-days Lost	No.	0	10

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In addition to above evaluation criteria, for specific violations penalty shall be imposed on the contractors under following circumstances:

Sr No	Description of violation	Severity	Penalty /
1.	Working without Permit	5	5000/-
2.	Untrained (TPSDI) worker on high-risk jobs.	5	5000/-
3.	Unhygienic/Bad condition of PPE	2	250/-
4.	Not following Tata Power Procedure & Standard	4	2000/-
5.	Unsafe Act/Condition of Severity 4	4	2000/-
6.	Unsafe Act/Condition of Severity 5	5	5000/-
7.	No Earthling of Electrical equipment	5	5000/-
8.	Damaged welding cable	5	5000/
9.	Violation of Positive Isolation Procedure (LOTO Not followed)	5	5000/
10.	ELCB of more than 30 mA/ELCB not working	5	5000/
11.	On/Off switch of welding m/c not working	5	5000/
12.	Electric cable tied with metal wire	5	5000/
13.	Leakage found DA hose / cylinder	5	5000/
14.	Use of LPG	5	5000/
15.	Use of Three-wheeler at the work site.	5	5000/
16.	Starting the job without Tool Box Talk	5	5000/
17.	Spatter falling on DA hose / Gas-line/ pathways / Equipment	5	5000/
18.	No safety latch in crane hook	5	5000/
19.	Load raised or swung over people or occupied areas of buildings	5	5000/
20.	Persons standing in swing area of construction equipments.	5	5000/
21.	Using damaged slings.	5	5000/
22.	Unstable scaffolding/non standard Scaffolding in use	5	5000/
23.	Handrails and mid-rails are missing	5	5000/
24.	Safety Harness not anchored with lifeline/fixed structure	5	5000/
25.	Fall arrestor not provided/ Not being used.	5	5000/
26.	Double life line not used for working at height	5	5000/
27.	No rubber mat in DB room	4	2000/-
28.	Water found accumulated in DB room/near welding machine.	4	2000/
29.	Inserting electric cables into socket, without using plug.	4	2000/
30.	Use of damaged electrical cable/two core cables.	4	2000/
31.	Inflammable material found in D.B Room./ welding areas.	4	2000/
32.	Loose material falling into excavated pit	4	2000/
33.	Water logging into excavated pit	4	2000/
34.	No / inadequate Barricade	4	2000/

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Sr No	Description of violation	Severity	Penalty /
35.	Undercut / cave-in found on sides of excavated pits	4	2000/
36.	Grinding wheel/ Coupling/ Piling winch/other rotating parts without guard	4	2000/
37.	The HMV/Mobile Crane operator does not having a valid HMV driving license.	4	2000/
38.	The loading area is not leveled properly.	4	2000/
39.	Ladder not anchored at top	4	2000/
40.	Opening found in working platform of scaffolding/floor	4	2000/
41.	Inadequate illumination at the working area	4	2000/
42.	Loose material lying on Gantry ,platform	4	2000/
43.	Cleaning body with Compressed Air.	3	500/-
44.	Gas Cylinders using without cap.	3	500/
45.	Gas Cylinders stored without securing	3	500/
46.	Bringing inside any other chemicals, apart from approved by Safety dept.	3	500/
47.	Using drum for sitting or accessing height.	3	500/
48.	Misusing emergency facilities like fire hydrant line/ hose box/ spray system/ eye wash etc.	3	500/
49.	No provision of Safety net where falling materials or tools may occurs	3	500/
50.	Taking electrical supply from non designated outlet (other than socket).	3	500/
51.	Restricted gangways due to unwanted materials.	3	500/
52.	Not reporting incident.	3	500/
53.	Entering into restricted area like switch yard/ hazardous storage etc.	3	500/
54.	Work without supervision	3	500/
55.	Parking of vehicle without applying wheel choke at right front-front and left rear-rear wheels other than passengers cars.	3	500/
56.	Vehicle without helper or co-driver.	3	500/
57.	Not wearing florescent safety jacket at site.	3	500/
58.	People travelling in load body of vehicle.	3	500/
59.	Parking of vehicles at non designated area.	3	500/
60.	Shifting heavy materials without guide ropes.	3	500/
61.	Using other than 24V lamp inside the confined space/Use of other than 24V lamps.	3	500/
62.	Angular/ starch loading/ lifting with Crane or hoist.	3	500/
63.	By passing the limit switch/ Safety Interlock.	3	500/
64.	Housekeeping activities on road without proper barricade.	3	500/

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Sr No	Description of violation	Severity	Penalty /
65.	Trying to board or alit from running vehicle.	3	500/
66.	Cylinder Valves of Gas cylinders not closed when not in use.	3	500/
67.	Flash-back arrester not used.	3	500/
68.	Trolley wheel found damaged.	3	500/
69.	Guy ropes of required length on both sides of object are not used during movement with load.	3	500/
70.	Scotch block/wedge not provide when the vehicle is parked.	3	500/
71.	Suitable Trolley not provided to hold the cylinders.	3	500/
72.	Locked First Aid box	3	500/
73.	Caution boards, danger signs (luminescent /red) along with emergency contact number are not found displayed.	3	500/
74.	Person found jumping barricading tape	3	500/
75.	Stacking of pipes, pile casing , drums without chock blocks/wedges	3	500/
76.	The terrain on which Heavy Equipment/Machinery moves is not reasonably hard.	3	500/
77.	Without Safety Helmet at working sites	4	250/-
78.	Without Crash Helmet (on bikes)	4	500/-
79.	Without Full body double lanyard Safety Harness (for work at height)	5	5000/-
80.	Without Hand gloves - Material Handling, Welding, Cutting,	4	100/-
81.	Without Safety goggles/ face shield - Welding/Cutting / Grinding	5	5000/-
82.	Handling Chemical without PVC Apron	5	5000/-
83.	Smoking in prohibited area (Closed Go-downs, Storage of flammable material, Storage of Gas cylinders)	5	1000/-
84.	Sleeping at Work Place	3	100/-
85.	Driving beyond speed limit	3	1000/-
86.	Seat Belt While Driving (for front seat passengers and driver)	3	500/-
87.	Driving without license	4	1000/-
88.	Heavy Commercial vehicles without reverse horn	3	500/-
89.	Non functional Head light/ tail light and side indicators	3	100/-
90.	Using Mobile Phone During Driving	5	5000/-
91.	Poor visibility of registration number/ without registration number	3	100/-
92.	Broken/ without Side view mirror	3	100/-
93.	Over speeding above specified limit	3	500/-
94.	Broken/ Without Pressure gauge on Oxygen/ LPG / Acetylene cylinder.	3	500/-

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Sr No	Description of violation	Severity	Penalty /
95.	Without Flash back arrestor on Industrial Acetylene & Oxygen cylinders.	5	5000/-
96.	Spillage of hazardous material/chemicals during transportation	4	2000/-
97.	Electrical equipment without Earthing/ ELCB/ Double Insulation Cable.	5	5000/-
98.	Lifting Tools & Tackles used without/ expired Test Certificates.	5	5000/-
99.	Housekeeping repeatedly not maintained		
100.	First Time	3	Warning
101.	Second Time	4	1000/-
102.	Third Time	5	5000/-
103.	Serious Violation Of House Keeping (after 1st or 2nd warning to be decided		Rs.10000/-
	by Project Manager depending on the severity)		and above
104.	Repeat Violation of same nature	5	5X Violation



HEALTH AND SAFETY POLICY

We, at Tata Power, reaffirm our belief that the health and safety of our stakeholders is of the utmost importance and takes precedence in all our business decisions. In pursuit of this belief and commitment, we strive to:

- Maintain and proactively improve our management systems to minimize health and safety hazards to our stakeholders and all others influenced by our activities.
- Comply and endeavour to exceed all applicable occupational health & safety legal and other requirements by setting the highest standards.
- Integrate health & safety procedures and best practices into every operational activity with assigned line-functional responsibilities at all levels, for improving and sustaining health & safety performance.
- Involve our employees in maintaining a safe and healthy work environment through risk assessments, periodic reviews of operational procedures, safe work methods and adoption of new technology.
- Develop a culture of safety through active leadership and provide appropriate training at all levels to enable employees developing their skills to work safely.
- Incorporate appropriate health & safety criteria into business decisions for selection of plant and technology, performance appraisal of individuals and appointments in key positions.
- Ensure availability at all times of appropriate resources to fully implement the health & safety policy of the company.
- Promptly report incidents, investigate for root causes and ensure lessons learnt shared and deployed across the company.
- Ensure service providers and their workmen align with company's safety codes and practices for the health and safety of personnel working with us.
- Set safety & health metrics as indicators of excellence, monitor progress and continually improve performance.

We shall actively communicate this policy to all stakeholders by suitable means and periodically review its relevance in continuously changing business environment.

(Praveer Sinha)

CEO & Managing Director

Date: 15th June, 2018





CORPORATE ENVIRONMENT POLICY

Tata Power is committed to a clean, safe and healthy environment, and we shall operate our facilities in an environmentally sensitive and responsible manner. Our commitment to environmental protection and stewardship will be achieved by:

- Complying with the requirements and spirit of applicable environmental laws and striving to exceed required levels of compliance wherever feasible
- Ensuring that our employees are trained to acquire the necessary skills to meet environmental standards
- Conserving natural resources by improving efficiency and reducing wastage
- Making business decisions that aim towards sustainable development
- Engaging with stakeholders to create awareness on sustainability

(Praveer Sinha)

CEO & Managing Director



Date: 15th June, 2018





CORPORATE SUSTAINABILITY POLICY

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
 - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
 - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
 - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
 - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
 - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.

(Praveer Sinha)

CEO & Managing Director

Date: 15th June, 2018



TATA POWER

